```
            GenCore version 5.1.6
            Copyright (c) 1993 - 2005  Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on:     July 11, 2005, 08:04:33 ; Search time 218 Seconds
                                       (without alignments)
                                       7873.643 Million cell updates/sec

Title:      US-09-896-186C-23
Perfect score:  1049
Sequence:   1 accaaagcattaattttat........tttaaccgtccagaaactag 1049

Scoring table:  IDENTITY NUC
Gapop 10.0, Gapext 1.0

Searched:   1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters:   2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :     Issued Patents NA:*
        1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
        2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
        3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
        4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
        5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
        6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
```

SUMMARIES

Result No.	Score	% Match	Query Length	DB	Length	ID	Description
1	111	10.6			5208	3	US-08-781-891-70	Sequence 70, Appl
2	111	10.6			5208	3	US-09-791-211-11	Sequence 11, Appl
3	111	10.6			5208	4	US-09-618-166-70	Sequence 70, Appl
4	111	10.6			5208	4	US-09-949-001-3	Sequence 3, Appli
5	111	10.6			5365	4	US-09-949-001-9	Sequence 9, Appli
6	82.8	7.9			6476	3	US-09-127-670-5	Sequence 5, Appli
7	81.2	7.7			4792	4	US-08-781-891-205	Sequence 205, App
8	81.2	7.7			4792	4	US-09-618-166-205	Sequence 205, App
9	55.4	5.3			98844	3	US-09-791-211-10	Sequence 10, Appl
10	55.4	5.3			143776	4	US-09-949-001-29	Sequence 29, Appl
11	55.4	5.3			144034	4	US-09-949-001-35	Sequence 35, Appl
12	51.2	4.9			29604	3	US-08-781-891-207	Sequence 207, App
13	51.2	4.9			29604	4	US-09-618-166-207	Sequence 207, App
14	49.2	4.7			7218	1	US-08-232-463-14	Sequence 14, Appl
15	45.2	4.3			601	4	US-09-949-001-104	Sequence 104, App
16	45.2	4.3			601	4	US-09-949-001-560	Sequence 560, App
17	42.2	4.0			1141	4	US-08-806-708B-22	Sequence 22, Appl
18	40.8	3.9			13059	4	US-08-956-171E-220	Sequence 220, App
19	40.8	3.9			13059	4	US-08-781-986A-220	Sequence 220, App
20	40	3.8			580073	4	US-08-545-528D-1	Sequence 1, Appli
21	39.2	3.7			1499	3	US-09-300-672-3	Sequence 3, Appli
22	39.2	3.7			1500	4	US-09-300-672-1	Sequence 1, Appli
c 23	38.2	3.6			601	4	US-09-949-016-87979	Sequence 87979, A
c 24	38.2	3.6			670689	4	US-09-949-016-12505	Sequence 12505, A
c 25	38.2	3.6			670690	4	US-09-949-016-14207	Sequence 14207, A
c 26	38	3.6			601	4	US-09-949-016-27467	Sequence 27467, A
27	38	3.6			601	4	US-09-949-016-27468	Sequence 27468, A
28	38	3.6			601	4	US-09-949-016-68562	Sequence 68562, A
29	38	3.6			601	4	US-09-949-016-68563	Sequence 68563, A
c 30	38	3.6			3595	4	US-09-949-016-492	Sequence 492, App
c 31	38	3.6			24166	4	US-09-949-016-13755	Sequence 13755, A
c 32	38	3.6			91665	4	US-09-949-016-12234	Sequence 12234, A
33	37.2	3.5			5433	3	US-08-929-329-1	Sequence 1, Appli
34	37.2	3.5			767677	4	US-09-949-016-12147	Sequence 12147, A
35	37.2	3.5			767677	4	US-09-949-016-17361	Sequence 17361, A
36	36.6	3.5			256287	4	US-09-949-016-14608	Sequence 14608, A
37	36.6	3.5			294836	4	US-09-949-016-15974	Sequence 15974, A
38	36.2	3.5			5215	4	US-09-231-899-71	Sequence 71, Appl
39	36	3.4			99916	4	US-09-816-095-3	Sequence 3, Appli
c 40	35.8	3.4			1653	4	US-09-583-110-2210	Sequence 2210, Ap
c 41	35.8	3.4			1653	4	US-09-107-433-1255	Sequence 1255, Ap
42	35.8	3.4			56976	4	US-09-949-016-17486	Sequence 17486, A
43	35.8	3.4			101674	4	US-09-949-016-12033	Sequence 12033, A
c 44	35.6	3.4			194714	4	US-09-949-016-11869	Sequence 11869, A
c 45	35.6	3.4			196714	4	US-09-949-016-15474	Sequence 15474, A

ALIGNMENTS

```
RESULT 1
US-08-781-891-70
; Sequence 70, Application US/08781891
; Patent No. 6090620
; GENERAL INFORMATION:
;   APPLICANT: Fu, Ying-Hui
;   APPLICANT: Yu, Chang-En
;   APPLICANT: Oshima, Junko
;   APPLICANT: Mulligan, John T.
;   APPLICANT: Schellenberg, Gerald D.
;   TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
;   TITLE OF INVENTION: WERNER'S SYNDROME
;   NUMBER OF SEQUENCES: 209
;   CORRESPONDENCE ADDRESS:
;    ADDRESSEE: SEED and BERRY LLP
;    STREET: 6300 Columbia Center, 701 Fifth Avenue
;    CITY: Seattle
;    STATE: Washington
;    COUNTRY: USA
;    ZIP: 98104-7092
;   COMPUTER READABLE FORM:
;    MEDIUM TYPE: Floppy disk
;    COMPUTER: IBM PC compatible
;    OPERATING SYSTEM: PC-DOS/MS-DOS
;    SOFTWARE: PatentIn Release #1.0, Version #1.30
;   CURRENT APPLICATION DATA:
;    APPLICATION NUMBER: US/08/781,891
;    FILING DATE: 27-DEC-1996
;    CLASSIFICATION: 800
;   ATTORNEY/AGENT INFORMATION:
;    NAME: No. 6090620tenburg Ph.D., Carol
;    REGISTRATION NUMBER: 39,317
;    REFERENCE/DOCKET NUMBER: 240052.419
;   TELECOMMUNICATION INFORMATION:
;    TELEPHONE: (206) 622-4900
;    TELEFAX: (206) 682-6031
;   INFORMATION FOR SEQ ID NO: 70:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 5208 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
US-08-781-891-70

Query Match             10.6%;  Score 111;  DB 3;  Length 5208;
Best Local Similarity   54.1%;  Pred. No. 1.3e-24;
Matches  272;  Conservative  0;  Mismatches  225;  Indels  6;  Gaps  2;

Qy   396 GATACCAAGAGAGATGAATCTGGAATAGCTTGGACTTGGCTTGGATATTGAGTGAGTGACCA 455
         |||| | |  |||    | ||| ||  ||| ||||||  ||||||||  |  || ||| ||||
```

```
Db  610  TTGCTTGAAATAAAGCAGTTAAAAAGGCAGTGTAGGAATTGAAGAGATCAGTGGAAA 669
              |||||| |  ||    ||  ||   ||||||||||||||||| ||
Qy  633  CTTTTCCATGACTATGGAGTTGTAGTATCAAAGATGTTGAGGATCTTCAGATTTAGCCAAC 692
              ||||| | |||| ||| | |||   |||||||||  | ||| |  ||| |
Db  670  CTTCTACGTGACTTTGATATCAAATTGAAGAATTTTGTGGAGTTGACAGAGTGTGCCAAT 729
              |    || || | | | |||  || |  || |||   ||
Qy  693  CAAAAAATTGGTGGAGATAAAAAAATGGGGCCTTGCCTCACTAACTGAGACACTTGTTTGC 752
              ||  | ||| || | |||   ||||||| ||
Db  730  AAAAAGTGAAATGTACAGAGACCTGGAGCCCTTAACAGTCTCGTTAAACACCTCTTAGGT 789
              |    |||   |||  || | |  ||||| |||| | || |||
Qy  753  AAAGAGCTCCTGAAGCAAACAGAATCAGGCTTGGGAACTCGGAGTTTATCCTCTGTCA 812
              ||||||||| | |  || || ||| |  ||||| ||| ||||  | ||||
Db  790  AAACAGCTCCTGAAAGACAAGCTCATCCGCTGGAACTCATGCTTCTTACAAGGTT 872
              |||||||||| | || ||| || |||| | ||| |  | |||||
Qy  813  AAGCAGCAGTTACAATACGCAGCAACGATGCTTATGCTTCATGGCATCTTTACAAGGTT 872
              ||||  || || || |  ||| | || | ||||||||| |||| | |||||
Db  850  GAGGACCAGAAACTGTATGCAGCCACTGACTTGCAGCCACCACTGATGCTTATGCTGGTTTTATTATTTACCGAAAT 909
              || | |||||||| ||| | |
Qy  873  CTTAAGGACCTTCCTGATGCTGT 895
              ||| |||| ||||
Db  910  TTAGAGATTTTGGATGATACTGT 932
```

```
Query Match       10.6%;   Score 111;  DB 4;  Length 5208;
Best Local Similarity  54.1%;   Pred. No. 1.3e-24;
Matches  272;  Conservative  0;  Mismatches  225;  Indels  6;  Gaps  2;
```

```
Db  433  GATATTAGCATGAGTCTATCAGATGGGATGTGGGATTGGTCGGAGTGGCACCA 492
              || | | ||||||| | | ||||||| ||||||| |||||||||||||||
Qy  456  AGTTTTAGAAAAAGTGTTCTCCCCGGGAAGGTTGCGACTGTTCGAGATGGTGGGATATGTGTAGATAGT 515
              |  | |||   |||   ||||| || ||  ||||||| || |||||||||||||||
Db  493  TTATACAATAGAGGGAAACT---TGGCAAGTTGCACTAATTCAGTTGTGTGTTCTGAG 549
              ||   |  ||| | | |||    || |  | |||||||||||||  |||||
Qy  516  AATTATTGTGATGTTATGCATATTTTT---CATTCTGGTATCCCTCAAAGTCTCCAACAT 572
              | |  | || |||| || | |||||   |  ||  | | ||||  | | |||
Db  550  AGCAAATGTTACTTGTTCCACGTTTCTTCCATGTCCATGTCAGTTTTCCCCAGGGATTAAAAATG 609
              ||   | || | | ||||  || |||| |||  || | |||| |||||||
Qy  573  CTTATTGAAGATTCAACACTTGTAAAGGTAGGTATTGGAATTGGAGCTGTGTTTTCTGAAG 632
              |||| ||| ||  | || || || ||| ||| ||||||||||||||||||| ||
Db  573  CTTATTGAAGATTCAACACTTGTAAAGGTAGGTATTGGAATTGGAGCTGTGTTTTCTGAAG 632
```

```
Query Match       10.6%;   Score 111;  DB 3;  Length 5208;
Best Local Similarity  54.1%;   Pred. No. 1.3e-24;
Matches  272;  Conservative  0;  Mismatches  225;  Indels  6;  Gaps  2;
```

RESULT 4
US-09-949-001-3
; Sequence 3, Application US/09949001
; Patent No. 6825336
; GENERAL INFORMATION:
;   APPLICANT: VENTER, J. Craig et al.
;   TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
;   TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF
;   FILE REFERENCE: CL000789
;   CURRENT APPLICATION NUMBER: US/09/949,001
;   CURRENT FILING DATE: 2003-01-15
;   PRIOR APPLICATION NUMBER: 60/231,323
;   PRIOR FILING DATE: 2000-09-08
;   NUMBER OF SEQ ID NOS: 848
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
;   LENGTH: 5208
;   TYPE: DNA
;   ORGANISM: Human
US-09-949-001-3

Query Match   10.6%;   Score 111;   DB 4;   Length 5208;
Best Local Similarity   54.1%;   Pred. No. 1.3e-24;
Matches 272; Conservative   0; Mismatches 225; Indels   6; Gaps   2;

Qy   396 GATACCAAGAGAGATGAATCTCGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
          ||||| ||| | ||| ||| |||| ||||| |||| | ||||||||| || ||||
Db   433 GATATTAGCATGAGTCTATCAGATGGGGATGGTGTGGGATTTGACATGGAGTGGCCACCA 492

Qy   456 AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCCAGATATGTGTAGATAGT 515
          ||| |||||| |||| | | ||||| |||| |||| | ||||||||| ||| |
Db   493 TTATACAATAGAGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTTCGAG 549

Qy   516 AATTATTGTGATGTTATGCATATTTT---CATTCTGGTATCCCTCAAAGTCTCCAACAT 572
          | || |||| | | || || || ||| || | ||| | | |||| || ||
Db   550 AGCAAATGTTACTTGTTACTTGTTCCACGTTTTCTTCCATGTCAGTTTTTCCCCAGGGATTAAAAATG 609

RESULT 5
US-09-949-001-9
; Sequence 9, Application US/09949001
; Patent No. 6825336
; GENERAL INFORMATION:
;   APPLICANT: VENTER, J. Craig et al.
;   TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
;   TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF
;   FILE REFERENCE: CL000789
;   CURRENT APPLICATION NUMBER: US/09/949,001
;   CURRENT FILING DATE: 2003-01-15
;   PRIOR APPLICATION NUMBER: 60/231,323
;   PRIOR FILING DATE: 2000-09-08
;   NUMBER OF SEQ ID NOS: 848
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
;   LENGTH: 5365
;   TYPE: DNA
;   ORGANISM: Human
US-09-949-001-9

Query Match   10.6%;   Score 111;   DB 4;   Length 5365;
Best Local Similarity   54.1%;   Pred. No. 1.3e-24;
Matches 272; Conservative   0; Mismatches 225; Indels   6; Gaps   2;

Qy   396 GATACCAAGAGAGATGAATCTCGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
          ||||| ||| | ||| ||| |||| ||||| |||| | ||||||||| || ||||
Db   434 GATATTAGCATGAGTCTATCAGATGGGGATGGTGTGGGATTTGACATGGAGTGGCCACCA 493

Qy   456 AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCCAGATATGTGTAGATAGT 515
          ||| |||||| |||| | | ||||| |||| |||| | ||||||||| ||| |
Db   494 TTATACAATAGAGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTTCGAG 550

Qy   516 AATTATTGTGATGTTATGCATATTTT---CATTCTGGTATCCCTCAAAGTCTCCAACAT 572
          | || |||| | | || || || ||| || | ||| | | |||| || ||
Db   551 AGCAAATGTTACTTGTTACTTGTTCCACGTTTTCTTCCATGTCAGTTTTTCCCCAGGGATTAAAAATG 610

Qy   573 CTTATTGAAGATTCAACACTTGTAAAGGTAGGTATTGGAATTGATGGTGACTCTGTGAAG 632
          |||||||||||||| |||| ||||||||||| | |||||||| |||||||||||| |
Db   611 TTGCTTGAAAATAAAGCAGTTAAAAAGCAGTGTAGGAATTGAAGGAGATCAGTCAGTGGAAA 669

Qy   633 CTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTCAGATTAGCCAAC 692
          ||||| | |||||| |||||| || |||||| ||| |||| | ||| |||||||||||
Db   670 CTTCTACGTGACTTTGATATCAAATTGAAGAATTTGTGGAGTTGACAGATGTTGCCAAT 729

Qy   693 CAAAAAATTGGTGGAGATAAAAAAATGGGGCCTTGCCTCACTAACTGAGACACTGTTTGC 752
          |||| ||||||| ||||| || ||| | || |||||| |
Db   730 AAAAAGCTGAAATGTACAGAGACCTGGAGCCTTAACAGTCTGGTTAAACACCTTCTTAGGT 789

Qy   753 AAAGAGCTCCTGAAGCCAAACAGAATCAGGCTTGGGAACTGGGAGTTTATCCTCTGTCA 812
          |||| ||||||||| || |||| || | ||| || ||| |||||||||||| | |||
Db   790 AAACAGCTCCTGAAAGACAAGTCTATCCGCTGAGCAGTTGGAGTAAATTTCCTCCTCACT 849

Qy   813 AAGCAGCAGTTACAATACGCAGCAACGATGCTTATGCTTATGTCATCTTTACAAGGTT 872
          ||||||||| ||| |||| | ||| || |||||||||||||| |||||| | |||||
Db   850 GAGGACCAGAAAACTGTATGCAGCCACTGATGCTTATGCTTGGTTTTATTATTACCGAAAT 909

Qy   873 CTTAAGGACCTTCCTGATGCTGT 895
          |||||| |||| |||| | ||
Db   910 TTAGAGATTTTGGATGATACTGT 932

```
Db  731 AAAAGCTGAAATGCACAGAGACCTGGAGCCTTAACAGTCTGGTTAAACACCTCTTAGGT 790

Qy  753 AAAGAGCTCCTGAAGCCAAACAGAATCAGGCTTGGGAGTTTTATCCTCTGTCA 812
            ||||||||||| ||  ||   ||||||||  |||
Db  791 AAACAGCTCCTGAAAGACAAGTCCATCCGCTGTAGCAATTGGAGTAAATTTCCTCTCACT 850

Qy  813 AAGCAGCAGTTACAATACGCAGCAACGATGCTTATGCTTCAGCATCTTTACAAGGTT 872
            ||  ||| ||||||| ||   |||   |||||||||||||
Db  851 GAGGACCAGAAACTGTATGCAACTGTATGCTGCTTATGCTGTGTTTTATTATTACCGAAAT 910

Qy  873 CTTAAGGACCTTCCTGATGCTGT 895
            ||||||||||||||||
Db  911 TTAGAGATTTTGGGATGATACTGT 933
```

RESULT 6
US-09-127-670-5
; Sequence 5, Application US/09127670
; Patent No. 6228583
; GENERAL INFORMATION:
;   APPLICANT: Massachusetts Institute for Technology
;   APPLICANT: Leonard P. Guarente
;   APPLICANT: David A. Sinclair
;   APPLICANT: David B. Lombard
;   TITLE OF INVENTION: ASSAYS FOR COMPOUNDS WHICH EXTEND LIFE
;   TITLE OF INVENTION: SPAN
;   FILE REFERENCE: MIT-7720pA
;   CURRENT APPLICATION NUMBER: US/09/127,670
;   CURRENT FILING DATE: 1998-07-31
;   EARLIER APPLICATION NUMBER: US 60/054,629
;   EARLIER FILING DATE: 1997-08-04
;   NUMBER OF SEQ ID NOS: 6
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 5
;   LENGTH: 6476
;   TYPE: DNA
;   ORGANISM: Murine
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (229)...(4432)
US-09-127-670-5

Query Match   7.9%;   Score 82.8; DB 3; Length 6476;
Best Local Similarity 53.2%; Pred. No. 2.1e-15;
Matches 199; Conservative 0; Mismatches 172; Indels 3; Gaps 1;

```
Qy  481 GGAAGGTTGCGACTGTCCAGATATGTGTAGATAGTAATTATTGTGATGTTATGCATATTT 540
            || || ||| | ||  |||| || ||| ||||||||||||||| |||||||||||||||
Db  494 GCAGAGTCGCAGTGATCAGTTGTGTGTCTGAGAACAAAGTTACTTGTTTCACATTT 553

Qy  541 TT--CATTCTGGTATCCCTCAAAGTCTCCAAACATCTTATTGAAGATTCAACACTTGTAA 597
            ||  |||  || |||| ||||||| ||  |||  ||||| |||| |||||| ||| ||||
Db  554 CTTCCATGTCAGTTTCCCCCAGGGATTAAAAATGTTACTAGAAACAAATCAATTAAGA 613

Qy  598 AGGTAGGTATTGGAATTGATGGTGACTCTGTGAAGCTTTTCCATGACTATGGAGTTAGTA 657
            ||| ||| ||||| ||||| ||||| | | ||||| |||| | || ||| |||
Db  614 AGGCAGGGGTTGGGATTGAAGGGGACCAGTGGAAACTTCTCGCGTGATTTTGACGTCAAGT 673

Qy  658 TCAAAGATGTTGAGGATCTTTCAGATTTAGCCAACCAACAAAATTGGTGGAGATAAAAAT 717
            | ||||||||| |||| |  ||  || | |||||| |||   || ||||||  | |||||
Db  674 TGGAGAGTTTTGTGGAGCTGACGGATGTTGCCAATGAAAAGTTGAAGTGCGCAGAGACCT 733

Qy  718 GGGGCCTTGCCTCCACTAACTGAGACACTTGTTGCAAAGAGCTCCTGAAGCCAAACAGAA 777
            || || ||||| | ||||| || ||   | |||| ||||   ||    ||  ||   |||
Db  734 GGAGCCTCAATGGTCTGGTTAAACACGTCTTAGGGAAACAACTTTTGAAAGACAAGTCCA 793

Qy  778 TCAGGCTTGGGAACTCAGGCTTGGGAGTTTTATCCTCTGTCAAAGCAGTACAATACGCAGCAA 837
            ||  || | | |  || || | | |||  |||||| | || |||   |||   ||||| |||
Db  794 TCCGCTGCAGCAATTGGAGTAATTTCCCCCTCACTGAGGACCAGAAACTGTATGCAGCCA 853

Qy  838 CGGATGCTTATGCT 851
            | |||||||||||
Db  854 CTGATGCTTATGCT 867
```

RESULT 7
US-08-781-891-205
; Sequence 205, Application US/08781891
; Patent No. 6090620
; GENERAL INFORMATION:
;   APPLICANT: Fu, Ying-Hui
;   APPLICANT: Yu, Chang-En
;   APPLICANT: Oshima, Junko
;   APPLICANT: Mulligan, John T.
;   APPLICANT: Schellenberg, Gerald D.
;   TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
;   TITLE OF INVENTION: WERNER'S SYNDROME
;   NUMBER OF SEQUENCES: 209
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: SEED and BERRY LLP
;   STREET: 6300 Columbia Center, 701 Fifth Avenue
;   CITY: Seattle
;   STATE: Washington
;   COUNTRY: USA
;   ZIP: 98104-7092
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: PatentIn Release #1.0, Version #1.30
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/781,891
;   FILING DATE: 27-DEC-1996
;   CLASSIFICATION: 800
;   ATTORNEY/AGENT INFORMATION:
;   NAME: No. 6090620tenburg Ph.D., Carol
;   REGISTRATION NUMBER: 39,317
;   REFERENCE/DOCKET NUMBER: 240052.419
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (206) 622-4900
;   TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 205:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 4792 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: 145..4347
US-08-781-891-205

Query Match   7.7%;   Score 81.2; DB 3; Length 4792;
Best Local Similarity 52.3%; Pred. No. 5.5e-15;
Matches 179; Conservative 0; Mismatches 163; Indels 0; Gaps 0;

```
Qy  510 GATAGTAATTATTGTGATGTTATGCATATTTTCATTCTGGTATCCTCAAAGTCTCCAA 569
            || ||  || ||||||||| ||| |||||| |||||||||||| |||| ||||||
Db  442 GAGAGCAAATGTTACTTGTTTCACATTTCTTCCCATGTCAGTTTTCCCCCAGGGATTAAAA 501

Qy  570 CATCTTATTGAAGATTCAACACTGTAAAGGTAGGTAGGTTGGAATTGATGGTGACTCTGTG 629
            ||||| |||| |||||| ||| |||||||| |||  || ||| ||| |||
Db  502 ATGTTACTAGAAACAAATCAATTAAGAAGGCAGGGGTTGGGATTGAAGGGGACCAGTGG 561

Qy  630 AAGCTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCC 689
            || ||||| | || ||| |||  ||| | ||||||||| |||| |  ||  || |
Db  562 AAACTTCTCGCGTGATTTTGACGTCAAGTTGGAGAGTTTTGTGGAGCTGACGGATGTTGCC 621

Qy  690 AACCAAAAAATTGGTGGAGATAAAAATGGGGCCTTGCCTCCACTAACTGAGACACTTGTT 749
            |||   ||  || ||||||  | ||||| || ||||| | ||||| || ||   | |||
Db  622 AATGAAAAGTTGAAGTGCGCAGAGACCTGAGCCTCAATGGTCTGGTTAAAACACGTCTTA 681

Qy  750 TGCAAAGAGCTCCTGAAGCCAAACAGAATCAGGCTTGGGAACTCAGCAATTGGAGTTTTATCCTCTG 809
            |||   ||    ||    ||  ||   ||||| || | | |  || |||| ||| |||  ||||||
Db  682 GGGAAACAACTTTTGAAAGACAAGTCCATCCGCTGCAGCAATTGGGAGTAATTTCCCCCTC 741
```

Qy 810 TCAAAGCAGCAGTTACAATACGGCAGCAACGGATGCTTATGCT 851
        |||||||||||||| |||||| ||| ||||||||||||||
Db 742 ACTGAGGACCAGAAACTGTATGCAGCCACTGATGCTTATGCT 783

RESULT 8
US-09-618-166-205
; Sequence 205, Application US/09618166
; Patent No. 6583112
; GENERAL INFORMATION:
;   APPLICANT: Fu, Ying-Hui
;   Yu, Chang-En
;   Oshima, Junko
;   Mulligan, John T.
;   Schellenberg, Gerald D.
;   TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
;   WERNER'S SYNDROME
;   NUMBER OF SEQUENCES: 209
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Seed Intellectual Property Law Group
;   STREET: 701 Fifth Avenue, Suite 6300
;   CITY: Seattle
;   STATE: Washington
;   COUNTRY: USA
;   ZIP: 98104-7092
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: Patentin Release #1.0, Version #1.30
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/618,166
;   FILING DATE: 17-Jul-2000
;   CLASSIFICATION: <Unknown>
;   ATTORNEY/AGENT INFORMATION:
;   NAME: McMasters, David D.
;   REGISTRATION NUMBER: 33,963
;   REFERENCE/DOCKET NUMBER: 240052.419C1
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (206) 622-4900
;   TELEFAX: (206) 682-6031
;   INFORMATION FOR SEQ ID NO: 205:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 4792 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: 145..4347
;   SEQUENCE DESCRIPTION: SEQ ID NO: 205:
US-09-618-166-205

Query Match   7.7%; Score 81.2; DB 4; Length 4792;
Best Local Similarity 52.3%; Pred. No. 5.5e-15;
Matches 179; Conservative   0; Mismatches 163; Indels   0; Gaps   0;

Qy 510 GATAGTAATTATTGTGATGTTATGCATAATTTTCATTCTGGTATCCCTCGGTATCCTCCAA 569
Db 442 GAGAGCAAATGTTACTTGTTCACATTTCTTCCATGTCAGTTTTCCCCCAGGGATTAAAA 501

Qy 570 CATCTTATTGAAGATTCAACACTTGTAAAGGTAGGTATTGGAATTGATGGTGACTCTCGTG 629
Db 502 ATGTTACTAGAGAAACAAATCATTAAGCAGGCAGGGGTTGGGATTGAAGGGACCAGTGG 561

Qy 630 AAGCTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGGAGGATCTTTCAGATTTAGCC 689
Db 562 AAACTTCTGCGTGATTTGACGTCAAGTTGGAGAGTTTTGTGGAGCTGACGGATGTTGCC 621

Qy 690 AACCAAAAAATTGGTGGAGATAAAAAATGGGGCCTTGCCTCCACTAACTGACACACTTGTT 749
Db 622 AATGAAAAAGTTGAAGTTGCGCAGAGACCTGGAGCCTCCAATGCTCTGTTAAACACGTCTTA 681

Qy 750 TGCAAAGAGCTCCTGAGCCAAACAGAATCAGGCTTGGGAACTGGGAGTTTATCCTCTG 809
Db 682 GGGAAACAACTTTGAAGACAAGTCCATCCGCTGCAGCAATGGGAGTAATTTCCCCCTC 741

Qy 810 TCAAAGCAGCAGTTACATACGGCAGCAACGACGGATGCTTATGCT 851
Db 742 ACTGAGGACCAGAAACTGTATGCAGCCACTGATGCTTATGCT 783

RESULT 9
US-09-791-211-10
; Sequence 10, Application US/0791211
; Patent No. 6448080
; GENERAL INFORMATION:
;   APPLICANT: Donna T. Ward
;   APPLICANT: Andrew T. Watt
;   TITLE OF INVENTION: ANTISENSE MODULATION OF WRN EXPRESSION
;   FILE REFERENCE: RTS-0205
;   CURRENT APPLICATION NUMBER: US/09/791,211
;   CURRENT FILING DATE: 2001-02-23
;   NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 10
;   LENGTH: 98844
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: unsure
;   LOCATION: 24962
;   OTHER INFORMATION: unknown
;   NAME/KEY: unsure
;   LOCATION: 64383
;   OTHER INFORMATION: unknown
;   NAME/KEY: unsure
;   LOCATION: 65468
;   OTHER INFORMATION: unknown
;   NAME/KEY: unsure
;   LOCATION: 65469
;   OTHER INFORMATION: unknown
;   NAME/KEY: unsure
;   LOCATION: 65470
;   OTHER INFORMATION: unknown
;   NAME/KEY: unsure
;   LOCATION: 65471
;   OTHER INFORMATION: unknown
;   NAME/KEY: unsure
;   LOCATION: 87130
;   OTHER INFORMATION: unknown
;   NAME/KEY: unsure
;   LOCATION: 89049
;   OTHER INFORMATION: unknown
US-09-791-211-10

Query Match   5.3%; Score 55.4; DB 3; Length 98844;
Best Local Similarity 60.1%; Pred. No. 9.3e-06;
Matches   92; Conservative   0; Mismatches 61; Indels   0; Gaps   0;

Qy   545 TTCTGGTATCCCTCAAAGTCTCCAACATCTTATTGAAGATTCAACACTTGTAAAGGTAGG 604
Db 45421 TACAGTTTTTCCCCAGGGATTAAAAATGTTGCTTGAAAATAAGACAGTAAAAAGGCAGG 45480

Qy   605 TATTGGAATTGATGGTGACTCTGTGAAGCTTTTCCATGACATGGAGTTAGTATCAAAGA 664
Db 45481 TGTAGGAATTGAAGGAGGATCAGTCAGTGGAAACTTCACGTGACTTTGATATCAAATTGAAGAA 45540

Qy   665 TGTTGAGGATCTTTCAGATTTAGCCACCAACCAAA 697
Db 45541 TTTTGTGGAGTTGACAGATGTTGCCAATAAAAA 45573

RESULT 10
US-09-949-001-29
; Sequence 29, Application US/09949001

```
;  Patent No. 6825336
;  GENERAL INFORMATION:
; ,  APPLICANT: VENTER, J. Craig et al.
; ,  TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; ,  TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF
; ,  FILE REFERENCE: CL000789
; ,  CURRENT APPLICATION NUMBER: US/09/949,001
; ,  CURRENT FILING DATE: 2003-01-15
; ,  PRIOR APPLICATION NUMBER: 60/231,323
; ,  PRIOR FILING DATE: 2000-09-08
; ,  NUMBER OF SEQ ID NOS: 848
; ,  SOFTWARE: FastSEQ for Windows Version 4.0
;  SEQ ID NO 29
; ,  LENGTH: 143776
; ,  TYPE: DNA
; ,  ORGANISM: Human
; ,  FEATURE:
; ,  NAME/KEY: misc_feature
; ,  LOCATION: (1)...(143776)
; ,  OTHER INFORMATION: n = A,T,C or G
US-09-949-001-29

Query Match             5.3%;  Score 55.4;  DB 4;  Length 143776;
Best Local Similarity  60.1%;  Pred. No. 1.2e-05;
Matches    92;  Conservative    0;  Mismatches    61;  Indels    0;  Gaps    0;

Qy        545  TTCTGGTATCCCTCAAAGTCTCCAACATCTTATTGAAGATTCAACACTTGTAAAGGTAGG  604
               ||||||||||||||||||||||| ||| || |||  ||||| | ||| | |||||||||
Db      33094  TACAGTTTTTCCCCAGGGATTAAAATGTGCTTGAAGATAAAATAAAGCAGTTAAAAGGCAGG  33153

Qy        605  TATTGGAATTGATGGTGACTCTGTGAAGCTTTTCCATGACTATGGAGTTAGTATCAAAGA  664
               |||||||| |||||  ||||  ||| ||||||||
Db      33154  TGTAGGAATTGAAGGAGATCAGTGGGAAACTTCTCACGTGACTTTGATATCAAATTGAAGAA  33213

Qy        665  TGTTGAGGATCTTTCAGATTTAGCCAACCAAAA  697
               |||||||||| |||| ||||  | ||||||||||
Db      33214  TTTTGTGGAGTTGACAGATGTTGCCAATAAAAA  33246
```

```
RESULT 11
US-09-949-001-35
; Sequence 35, Application US/09949001
; Patent No. 6825336
;  GENERAL INFORMATION:
; ,  APPLICANT: VENTER, J. Craig et al.
; ,  TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; ,  TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF
; ,  FILE REFERENCE: CL000789
; ,  CURRENT APPLICATION NUMBER: US/09/949,001
; ,  CURRENT FILING DATE: 2003-01-15
; ,  PRIOR APPLICATION NUMBER: 60/231,323
; ,  PRIOR FILING DATE: 2000-09-08
; ,  NUMBER OF SEQ ID NOS: 848
; ,  SOFTWARE: FastSEQ for Windows Version 4.0
;  SEQ ID NO 35
; ,  LENGTH: 144034
; ,  TYPE: DNA
; ,  ORGANISM: Human
; ,  FEATURE:
; ,  NAME/KEY: misc_feature
; ,  LOCATION: (1)...(144034)
; ,  OTHER INFORMATION: n = A,T,C or G
US-09-949-001-35

Query Match             5.3%;  Score 55.4;  DB 4;  Length 144034;
Best Local Similarity  60.1%;  Pred. No. 1.2e-05;
Matches    92;  Conservative    0;  Mismatches    61;  Indels    0;  Gaps    0;

Qy        545  TTCTGGTATCCCTCAAAGTCTCCAACATCTTATTGAAGATTCAACACTTGTAAAGGTAGG  604
               ||||||||||||||||||||||| ||| || |||  ||||| | ||| | |||||||||
Db      33094  TACAGTTTTTCCCCAGGGATTAAAATGTGCTTGAAGATAAAATAAAGCAGTTAAAAGGCAGG  33153

Qy        605  TATTGGAATTGATGGTGACTCTGTGAAGCTTTTCCATGACTATGGAGTTAGTATCAAAGA  664
```

```
Db      33154  TGTAGGAATTGAAGGAGATCAGTGGGAAACTTCTCACGTGACTTTGATATCAAATTGAAGAA  33213

Qy        665  TGTTGAGGATCTTTCAGATTTAGCCAACCAAAA  697
               |||||||||| |||| ||||  | ||||||||||
Db      33214  TTTTGTGGAGTTGACAGATGTTGCCAATAAAAA  33246
```

```
RESULT 12
US-08-781-891-207
; Sequence 207, Application US/08781891
; Patent No. 6090620
;  GENERAL INFORMATION:
; ,  APPLICANT: Fu, Ying-Hui
; ,  APPLICANT: Yu, Chang-En
; ,  APPLICANT: Oshima, Junko
; ,  APPLICANT: Mulligan, John T.
; ,  APPLICANT: Schellenberg, Gerald D.
; ,  TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
; ,  TITLE OF INVENTION: WERNER'S SYNDROME
; ,  NUMBER OF SEQUENCES: 209
; ,  CORRESPONDENCE ADDRESS:
; ,  ADDRESSEE: SEED and BERRY LLP
; ,  STREET: 6300 Columbia Center, 701 Fifth Avenue
; ,  CITY: Seattle
; ,  STATE: Washington
; ,  COUNTRY: USA
; ,  ZIP: 98104-7092
; ,  COMPUTER READABLE FORM:
; ,  MEDIUM TYPE: Floppy disk
; ,  COMPUTER: IBM PC compatible
; ,  OPERATING SYSTEM: PC-DOS/MS-DOS
; ,  SOFTWARE: PatentIn Release #1.0, Version #1.30
; ,  CURRENT APPLICATION DATA:
; ,  APPLICATION NUMBER: US/08/781,891
; ,  FILING DATE: 27-DEC-1996
; ,  CLASSIFICATION: 800
; ,  ATTORNEY/AGENT INFORMATION:
; ,  NAME: No. 6090620tenburg Ph.D., Carol
; ,  REGISTRATION NUMBER: 39,317
; ,  REFERENCE/DOCKET NUMBER: 240052.419
; ,  TELECOMMUNICATION INFORMATION:
; ,  TELEPHONE: (206) 622-4900
; ,  TELEFAX: (206) 682-6031
;  INFORMATION FOR SEQ ID NO: 207:
; ,  SEQUENCE CHARACTERISTICS:
; ,  LENGTH: 29604 base pairs
; ,  TYPE: nucleic acid
; ,  STRANDEDNESS: single
; ,  TOPOLOGY: linear
US-08-781-891-207

Query Match             4.9%;  Score 51.2;  DB 3;  Length 29604;
Best Local Similarity  56.5%;  Pred. No. 9.6e-05;
Matches    95;  Conservative    0;  Mismatches    73;  Indels    0;  Gaps    0;

Qy        545  TTCTGGTATCCCTCAAAGTCTCCAACATCTTATTGAAGATTCAACACTTGTAAAGGTAGG  604
               ||| || | | |||||  |||| ||  ||  ||||||||| | ||| | |||||||||
Db      19789  TTTAGTTTTTCCCCCAGGGATTAAAATGTTACTAGAAAACAAATCAATTAAGAGGCAGG  19848

Qy        605  TATTGGAATTGATGGTGACTCTGTGAAGCTTTTCCATGACTATGGAGTTAGTATCAAAGA  664
               |||||||| || | | || | || | || ||||| |||| ||||| ||| | ||||||
Db      19849  GGTTGGAATTGAAGGGGACCAGTGGGAAACTTCTGCGTGATTTTGACGTCAAGTGGAGAG  19908

Qy        665  TGTTGAGGATCTTTCAGATTTAGCCAACCAAAAATTGGTGGAGATAA  712
               |||||||||  |||| ||||  | |||||||||||
Db      19909  TTTTGTGGAGTTGCGGTTGCCAATGAAAAGGTAGGCGTAATAAA  19956
```

```
RESULT 13
US-09-618-166-207
; Sequence 207, Application US/09618166
; Patent No. 6583112
```

GENERAL INFORMATION:
APPLICANT: Fu, Ying-Hui
Yu, Chang-En
Oshima, Junko
Mulligan, John T.
Schellenberg, Gerald D.
TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
WERNER'S SYNDROME
NUMBER OF SEQUENCES: 209
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/618,166
FILING DATE: 17-Jul-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: McMasters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 240052.419C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 207:
SEQUENCE CHARACTERISTICS:
LENGTH: 29604 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 207:
US-09-618-166-207

Query Match   4.9%; Score 51.2; DB 4; Length 29604;
Best Local Similarity   56.5%; Pred. No. 9.6e-05;
Matches 95; Conservative   0; Mismatches 73; Indels   0; Gaps   0;

Qy   545 TTCTGGTATCCCTCAAAGTCTCCAACATCTTATTGAAGATTCAACACTTGTAAAGGTAGG 604
          ||| || ||||| || || ||||| | |||| |||| || |||| |||
Db 19789 TTTAGTTTTCCCCCAGGGATTAAAAATGTTACTAGAAAACAAATCAATTAAGAAGGCAGG 19848

Qy   605 TATTGGAATTGATGGTGACTCTGTGAAGCTTTCCATGACTATGGAGTTAGTATCAAAGA 664
          |||||||| || ||||| ||| | |||| ||| || |
Db 19849 GGTTGGGATTGAAGGGACCAGTGAAACTTCTGCGTGATTTTGACGTCAAGTTGGAGAG 19908

Qy   665 TGTTGAGGAGGATCTTCAGATTTAGCCAACCAAAAAATTGGTGGAGATAA 712
          || |||| ||| | |||| || |||
Db 19909 TTTTGTGGAGCTGACGGATGTTGCCAATGAAAAAGGTAGGCGTAATAA 19956

RESULT 14
US-08-232-463-14
; Sequence 14, Application US/08232463
Patent No. 5670367
GENERAL INFORMATION:
APPLICANT: DORNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 1800 Diagonal Road, Suite 500
CITY: Alexandria
STATE: VA

COUNTRY: USA
ZIP: 22313-0299
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,463
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/935,313
FILING DATE:
APPLICATION NUMBER: EP 91 114 300.6
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 30472/114 IMMU
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
TELEFAX: (703)683-4109
TELEX: 899149
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
CLONE: pTZgpt-F1s
US-08-232-463-14

Query Match   4.7%; Score 49.2; DB 1; Length 7218;
Best Local Similarity   11.5%; Pred. No. 0.00017;
Matches 33; Conservative 140; Mismatches 113; Indels   0; Gaps   0;

Qy   9 ATTAATTTTTATTTTTTGTTTCAGTAAAAGAAATGTCATCGTCAAATTGGATCGACGAC 68
          | ||||||| ||||||| | || |||
Db   992 ACTATTTTCCTTCGTTTGCCATACGCTCACAGAATTAATTCCGAGCTTCCTACAATTTCTCC 1051

Qy   69 GCTTTTACAGAGGAAGAGCTTCTCGCTATCGACGCCATCGAAGCTTCGAAGCTTCCTACAATTTCTCC 128
                                 :::::::::YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY
          | || ::: :
Db   1052 GAGGGAGCTTGCGATYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY 1111

Qy   129 CGTTCTTCTTCTTCCTTCCTCTGCTCCGACCGTACAAGCTACAACCTCCGTCCAT 188
          YYYYYYYYYYYYYYYYYYY :::: :::::YYYYYYYYYYYYYYYYYYYYYYYY
Db   1112 YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY 1171

Qy   189 GGCCACGAGGAGGAGGATCCAAATCAAATCCCCAATAAATATCCGTCGCCAATTGCTCGTTCC 248
          :::: : :::: : ::: : :::::::YYYYYYYYYYYYYYYYYYYYYYYY
Db   1172 YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY 1231

Qy   249 ATCACTTCTTCTACATCTTATAAACGATTTCCTCTCTCCCGTTGCC 294
          ::::::::: :::: : ::::: :::::YYYYYYYYYYYYYYYY
Db   1232 YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY 1277

RESULT 15
US-09-949-001-104
; Sequence 104, Application US/09949001
Patent No. 6825336
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL000789
CURRENT APPLICATION NUMBER: US/09/949,001
CURRENT FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: 60/231,323
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 848

```
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 601
; TYPE: DNA
;   ORGANISM: Human
US-09-949-001-104

Query Match     4.3%;   Score 45.2;  DB 4;  Length 601;
Best Local Similarity  58.0%;   Pred. No. 0.00064;
Matches   80;  Conservative   0;  Mismatches  58;  Indels    0;  Gaps    0;

Qy    712 AAAAATGGGGCCTTGCCTCACTAACTGAGACACTTGTTTGCAAAGAGCTCCTGAAGCCAA 771
              | |  ||||||   ||  |     |    ||  ||| ||||||||
Db    306 AGACCTGGAGCCTTAACAGTCTTGGTAAACACCTCTTAGGTAAACAGCTCCTGAAAGACA 365

Qy    772 ACAGAATCAGGCTTGGGAACTGGGAGTTTTATCCTCTGTCAAAGCAGCAGTTACAATACG 831
              |||  | || ||   |||||||    | |||||| | | || || || ||
Db    366 AGTCTATCCGCTGTAGCAATTGGAGTAAATTTCCTCTCACTGAGGACCAGAAACTGTATG 425

Qy    832 CAGCAACGGATGCTTATG 849
             ||||| || |||||||||
Db    426 CAGCCACTGATGCTTATG 443


Search completed: July 11, 2005, 09:36:55
Job time : 224 secs
```

GenCore version 5.1.6

Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: July 11, 2005, 08:05:32 ; Search time 49 Seconds
                                   (without alignments)
                                   438.754 Million cell updates/sec

Title: US-09-896-186C-24
Perfect score: 1491
Sequence: 1 MSSSNWIDDAFTEEELLAID.........YASWHLYKVLKDLPDAVSGS 288

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 7464906 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :   Issued Patents AA:*
              1: /cgn2_6/pcodata/1/iaa/5A_COMB.pep:*
              2: /cgn2_6/pcodata/1/iaa/5B_COMB.pep:*
              3: /cgn2_6/pcodata/1/iaa/6A_COMB.pep:*
              4: /cgn2_6/pcodata/1/iaa/6B_COMB.pep:*
              5: /cgn2_6/pcodata/1/iaa/PCTUS_COMB.pep:*
              6: /cgn2_6/pcodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Match Length	DB	ID	Description
1	352	23.6	1409	4	US-09-949-001-22	Sequence 22, Appl
2	352	23.6	1432	3	US-08-781-891-71	Sequence 71, Appl
3	352	23.6	1432	4	US-09-618-166-71	Sequence 71, Appl
4	352	23.6	1432	4	US-09-949-001-16	Sequence 16, Appl
5	339	22.7	1401	3	US-09-127-670-6	Sequence 6, Appli
6	330	22.1	1401	3	US-08-781-891-206	Sequence 206, App
7	330	22.1	1401	4	US-09-618-166-206	Sequence 206, App
8	175	11.7	186	4	US-09-270-767-33220	Sequence 32220, A
9	169.5	11.4	223	4	US-09-328-352-6289	Sequence 6289, Ap
10	94.5	6.3	858	4	US-09-248-796A-19082	Sequence 19082, A
11	93.5	6.3	661	4	US-09-248-796A-18480	Sequence 18480, A
12	93	6.2	2224	4	US-09-054-272-38	Sequence 38, Appl
13	93	6.2	3079	5	PCT-US94-00198-4	Sequence 4, Appli
14	92.5	6.2	375	4	US-09-270-767-42422	Sequence 42422, A
15	92.5	6.2	481	4	US-09-328-352-4475	Sequence 4475, Ap
16	91.5	6.1	1836	4	US-09-949-016-7432	Sequence 7432, Ap
17	89.5	6.0	260	4	US-09-270-767-33551	Sequence 33551, A
18	89.5	6.0	260	4	US-09-270-767-48768	Sequence 48768, A
19	89	6.0	930	4	US-09-134-001C-5314	Sequence 5314, Ap
20	89	6.0	930	4	US-09-386-962C-10	Sequence 10, Appl
21	87.5	5.9	471	4	US-09-248-796A-14787	Sequence 14787, A
22	87.5	5.9	1375	3	US-09-722-139-2	Sequence 2, Appli
23	87.5	5.9	1375	3	US-09-721-832-2	Sequence 2, Appli
24	87.5	5.9	1375	3	US-09-721-689-2	Sequence 2, Appli
25	86.5	5.8	348	1	US-07-989-845-2	Sequence 2, Appli
26	86.5	5.8	348	5	PCT-US93-11298-2	Sequence 2, Appli
27	86.5	5.8	480	3	US-08-987-367-2	Sequence 2, Appli
28	86.5	5.8	657	4	US-09-284-768A-7	Sequence 7, Appli
29	84.5	5.7	341	4	US-09-800-170-4	Sequence 4, Appli
30	84.5	5.7	480	4	US-09-429-906B-6	Sequence 6, Appli
31	84	5.6	332	4	US-09-252-991A-32235	Sequence 32235, A
32	83	5.6	225	4	US-09-107-532A-5540	Sequence 5540, Ap
33	83	5.5	1516	4	US-09-949-016-6951	Sequence 6951, Ap
34	82.5	5.5	480	3	US-08-987-367-4	Sequence 4, Appli
35	82.5	5.5	608	4	US-09-284-768A-4	Sequence 4, Appli
36	82	5.5	229	4	US-09-198-452A-200	Sequence 200, App
37	82	5.5	231	4	US-09-438-185A-187	Sequence 187, App
38	82	5.5	333	3	US-09-134-001C-4528	Sequence 4528, Ap
39	82	5.5	473	4	US-09-107-532A-5941	Sequence 5941, Ap
40	81.5	5.5	933	4	US-09-248-796A-20513	Sequence 20513, A
41	81	5.4	560	4	US-09-734-237B-66	Sequence 66, Appl
42	81	5.4	561	4	US-09-734-237B-68	Sequence 68, Appl
43	81	5.4	860	4	US-07-945-295-4	Sequence 4, Appli
44	81	5.4	1539	4	US-09-949-016-9653	Sequence 9653, Ap
45	80.5	5.4	381	4	US-09-540-236-3615	Sequence 3615, Ap

ALIGNMENTS

RESULT 1
US-09-949-001-22
; Sequence 22, Application US/09949001
; Patent No. 6825336
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL000789
; CURRENT APPLICATION NUMBER: US/09/949,001
; CURRENT FILING DATE: 2003-01-15
; PRIOR APPLICATION NUMBER: 60/231,323
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 848
; SEQ ID NO 22
; LENGTH: 1409
; TYPE: PRT
; ORGANISM: Human
US-09-949-001-22

Query Match   23.6%; Score 352; DB 4; Length 1409;
Best Local Similarity   37.7%; Pred. No. 1.5e-29;
Matches   75; Conservative 41; Mismatches 75; Indels   8; Gaps   3;

Qy   88 NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
             : |:| ||| |:| :|:: ||| :| :| :| :||
Db   47 DLPFLEFTGSIVYSYDASDCSFLSE------DISMSLSDGDVVGFDMEWPPLYNRGKL-G 99

Qy   148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGSVKLFHDYGVSI 206
             | | :| || : |:::|| | || |||:| | :|:| |:|:| : :| |
Db   100 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 159

Qy   207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
          |: |:||| |:|: :|: || :|||: :| ||: :|:| || :| :
Db   160 KNFVELTDVANKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 219

Qy   267 DAYASWHLYKVLKDLPDAV 285
          ||||||||: :||:||:||
Db   220 DAYAGFIIYRNLEILDDTV 238

RESULT 2
US-08-781-891-71
; Sequence 71, Application US/08781891
; Patent No. 6090620
; GENERAL INFORMATION:
; APPLICANT: Fu, Ying-Hui
; APPLICANT: Yu, Chang-En
; APPLICANT: Oshima, Junko

APPLICANT: Mulligan, John T.
APPLICANT: Schellenberg, Gerald D.
TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
TITLE OF INVENTION: WERNER'S SYNDROME
NUMBER OF SEQUENCES: 209
CORRESPONDENCE ADDRESS:
ADDRESSEE: SEED and BERRY LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/781,891
FILING DATE: 27-DEC-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: NO. 6090620tenburg Ph.D., Carol
REGISTRATION NUMBER: 39,317
REFERENCE/DOCKET NUMBER: 240052.419
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 1432 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
US-08-781-891-71

Query Match   23.6%;   Score 352; DB 3; Length 1432;
Best Local Similarity 37.7%; Pred. No. 1.6e-29;
Matches   75; Conservative 41; Mismatches 75; Indels   8; Gaps   3;

Qy   88 NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
        : :||:::|::||:||:: : ||:|::|| : ::|||
Db   43 DLPFLEFTGSIVYSYDASDCSFLSE------DISMSLSDGDVVGFDMEWPPLYNRGKL-G 95

Qy 148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGSVKLFHDYGVSI 206
        ||::|:|::|:|:   :::|||:| ||::||||::||::|::|::|::|::|:|:||:
Db   96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy 207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
        |: ::||:|:|:|::|||: | |::| |::| ||::|:::::|::||::||||||
Db 156 KNFVELTDVANKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy 267 DAYASWHLYKVLKDLPDAV 285
        |||| |||:|::||||:|
Db 216 DAYAGFIIYRNLEILDDTV 234

RESULT 3
US-09-618-166-71
; Sequence 71, Application US/09618166
; Patent No. 6583112
; GENERAL INFORMATION:
APPLICANT: Fu, Ying-Hui
Yu, Chang-En
Oshima, Junko
Mulligan, John T.
Schellenberg, Gerald D.
TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
WERNER'S SYNDROME
NUMBER OF SEQUENCES: 209
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300

CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/618,166
FILING DATE: 17-Jul-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: McMasters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 240052.419C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 1432 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 71:
US-09-618-166-71

Query Match   23.6%;   Score 352; DB 4; Length 1432;
Best Local Similarity 37.7%; Pred. No. 1.6e-29;
Matches   75; Conservative 41; Mismatches 75; Indels   8; Gaps   3;

Qy   88 NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
        : :||:::|::||:||:: : ||:|::|| : ::|||
Db   43 DLPFLEFTGSIVYSYDASDCSFLSE------DISMSLSDGDVVGFDMEWPPLYNRGKL-G 95

Qy 148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGSVKLFHDYGVSI 206
        ||::|:|::|:|:   :::|||:| ||::||||::||::|::|::|::|::|:|:||:
Db   96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy 207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
        |: ::||:|:|:|::|||: | |::| |::| ||::|:::::|::||::||||||
Db 156 KNFVELTDVANKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy 267 DAYASWHLYKVLKDLPDAV 285
        |||| |||:|::||||:|
Db 216 DAYAGFIIYRNLEILDDTV 234

RESULT 4
US-09-949-001-16
; Sequence 16, Application US/09949001
; Patent No. 6825336
; GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL000789
CURRENT APPLICATION NUMBER: US/09/949,001
CURRENT FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: 60/231,323
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 848
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 16
LENGTH: 1432
TYPE: PRT
ORGANISM: Human
US-09-949-001-16

Query Match   23.6%;   Score 352; DB 4; Length 1432;
Best Local Similarity 37.7%; Pred. No. 1.6e-29;

Left column:

```
Matches    75;   Conservative    41;   Mismatches    75;   Indels    8;   Gaps    3;

Qy    88  NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG  147
              :.|:.||:.|||.:||:      ||||:.|:::|
Db    43  DLPFLEFTGSIVYSYDASDCSFLSE------DISMSLSDGDVVGFDMEWPPLYNRGKL-G   95

Qy   148  KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGSVKLFHDYGVSI   206
              |||.||:||  |:||:|| ||.:|:||||:.:||||||  |:|||||:|
Db    96  KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL  155

Qy   207  KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLYAAT   266
              |:  :||:||:|||| |.|| || |:|:||.:  :||:  : ||||
Db   156  KNFVELTDVANKKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT  215

Qy   267  DAYASWHLYKVLKDLPDAV  285
              ||||:.:|:.|:.:||||
Db   216  DAYAGFIIYRNLEILDDTV  234


RESULT 5
US-09-127-670-6
; Sequence 6, Application US/09127670
; Patent No. 6228583
; GENERAL INFORMATION:
;   APPLICANT: Massachusetts Institute for Technology
;   APPLICANT: Leonard P. Guarente
;   APPLICANT: David A. Sinclair
;   APPLICANT: David B. Lombard
;   TITLE OF INVENTION: ASSAYS FOR COMPOUNDS WHICH EXTEND LIFE
;   TITLE OF INVENTION: SPAN
;   FILE REFERENCE: MIT-7720pA
;   CURRENT APPLICATION NUMBER: US/09/127,670
;   CURRENT FILING DATE: 1998-07-31
;   EARLIER APPLICATION NUMBER: US 60/054,629
;   EARLIER APPLICATION FILING DATE: 1997-08-04
;   NUMBER OF SEQ ID NOS: 6
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 6
;   LENGTH: 1401
;   TYPE: PRT
;   ORGANISM: Murine
US-09-127-670-6

Query Match             22.7%;   Score 339; DB 3;  Length 1401;
Best Local Similarity   36.6%;   Pred. No. 4.2e-28;
Matches    74;   Conservative    42;   Mismatches    72;   Indels    14;   Gaps    5;

Qy    88  NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG  147
              :.|:.||:.||||      ||||:.|:::|
Db    37  NLPFLEFPGSIVYSYEASD----CSFLSEDISMRLSDGDV--VGFDMEWPPIYK----PG   86

Qy   148  K---VATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGSVKLFHDYG    203
              |   ||:.|:||  |:||:|| ||.:|:||||:.:||||||  |:|||||:|
Db    87  KRSRVAVIQLCVSENKCYLFHISSMSVFPQGLKMLLENKSIKKAGVGIEGDQWKLLRDFD  146

Qy   204  VSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQY  263
              | |:  :||:||:|||| |.|| || |:|:||.:  :||:
Db   147  VKLESFVELTDVANEKLKCAETWSLNGLVKHVLGKQLLKDKSIRCSNWSNFPLTEDQKLY  206

Qy   264  AATDAYASWHLYKVLKDLPDAV  285
              ||||||||
Db   207  AATDAYAYAGLIIYQKLGNLGDTV  228


RESULT 6
US-08-781-891-206
; Sequence 206, Application US/08781891
; Patent No. 6090620
; GENERAL INFORMATION:
;   APPLICANT: Fu, Ying-Hui
;   APPLICANT: Yu, Chang-En
;   APPLICANT: Oshima, Junko
;   APPLICANT: Mulligan, John T.
```

Right column:

```
;   APPLICANT: Schellenberg, Gerald D.
;   TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
;   TITLE OF INVENTION: WERNER'S SYNDROME
;   NUMBER OF SEQUENCES: 209
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: SEED and BERRY LLP
;     STREET: 6300 Columbia Center, 701 Fifth Avenue
;     CITY: Seattle
;     STATE: Washington
;     COUNTRY: USA
;     ZIP: 98104-7092
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Floppy disk
;     COMPUTER: IBM PC compatible
;     OPERATING SYSTEM: PC-DOS/MS-DOS
;     SOFTWARE: PatentIn Release #1.0, Version #1.30
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/08/781,891
;     FILING DATE: 27-DEC-1996
;     CLASSIFICATION: 800
;   ATTORNEY/AGENT INFORMATION:
;     NAME: No. 609620tenburg Ph.D., Carol
;     REGISTRATION NUMBER: 39,317
;     REFERENCE/DOCKET NUMBER: 240052.419
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (206) 622-4900
;     TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 206:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 1401 amino acids
;     TYPE: amino acid
;     TOPOLOGY: linear
;     MOLECULE TYPE: protein
US-08-781-891-206

Query Match             22.1%;   Score 330; DB 3;  Length 1401;
Best Local Similarity   36.0%;   Pred. No. 4.3e-27;
Matches    72;   Conservative    43;   Mismatches    71;   Indels    14;   Gaps    5;

Qy    88  NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG  147
              :.|:.||:.||||      ||||:.|:::|
Db    37  NLPFLEFPGSIVYSYEASD----CSFLSEDISMRLSDGDV--VGFDMEWPPIYK----PG   86

Qy   148  K---VATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGSVKLFHDYG    203
              |   ||:.|:||  |:||:|| ||.:|:||||:.:||||||  |:|||||:|
Db    87  KRSRVAVIQLCVSESKCYLFHISSMSVFPQGLKMLLENKSIKKAGVGIEGDQWKLLRDFD  146

Qy   204  VSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQY  263
              | |:  :||:||:|||| |.|| || |:|:||.:  :||:
Db   147  VKLESFVELTDVANEKLKCAETWSLNGLVKHVLGKQLLKDKSIRCSNWSNFPLTEDQKLY  206

Qy   264  AATDAYASWHLYKVLKDLPD  283
              ||||||||
Db   207  AATDAYAYAGLIIYQKLGNLGD  226


RESULT 7
US-09-618-166-206
; Sequence 206, Application US/09618166
; Patent No. 6583112
; GENERAL INFORMATION:
;   APPLICANT: Fu, Ying-Hui
;   APPLICANT: Yu, Chang-En
;   APPLICANT: Oshima, Junko
;   APPLICANT: Mulligan, John T.
;   APPLICANT: Schellenberg, Gerald D.
;   TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
;   TITLE OF INVENTION: WERNER'S SYNDROME
;   NUMBER OF SEQUENCES: 209
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Seed Intellectual Property Law Group
;     STREET: 701 Fifth Avenue, Suite 6300
;     CITY: Seattle
```

```
          STATE: Washington
          COUNTRY: USA
          ZIP: 98104-7092
     COMPUTER READABLE FORM:
          MEDIUM TYPE: Floppy disk
          COMPUTER: IBM PC compatible
          OPERATING SYSTEM: PC-DOS/MS-DOS
          SOFTWARE: PatentIn Release #1.0, Version #1.30
     CURRENT APPLICATION DATA:
          APPLICATION NUMBER: US/09/618,166
          FILING DATE: 17-Jul-2000
          CLASSIFICATION: <Unknown>
     ATTORNEY/AGENT INFORMATION:
          NAME: McMasters, David D.
          REGISTRATION NUMBER: 33,963
          REFERENCE/DOCKET NUMBER: 240052.419C1
     TELECOMMUNICATION INFORMATION:
          TELEPHONE: (206) 622-4900
          TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 206:
     SEQUENCE CHARACTERISTICS:
          LENGTH: 1401 amino acids
          TYPE: amino acid
          TOPOLOGY: linear
     MOLECULE TYPE: protein
     SEQUENCE DESCRIPTION: SEQ ID NO: 206:
US-09-618-166-206

Query Match      22.1%;  Score 330;  DB 4;  Length 1401;
Best Local Similarity  36.0%;  Pred. No. 4.3e-27;
Matches  72;  Conservative  43;  Mismatches  71;  Indels  14;  Gaps  5;

Qy  88  NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG  147
        |||||| |:||           :|
Db  37  NLPFLEFPGSIVYSYFASD----CSFLSEDISMRLSDGDV--VGFDMEWPPIYK----PG  86

Qy  148 K---VATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGDSVKLFHDYG  203
           ||  :|||| :||||||   |:::|||||:||||| || ||||||
Db  87  KRSRVAVIQLCVSESKCYLFHISSMSVFPQGLKMLLENKSIKKAGVGIEGDQWKLLRDFD  146

Qy  204 VSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQY  263
        |||| ||||||||||||||||||||||| |:||| :|| ||||||||||
Db  147 VKLESFVELTDVANEKLKCAETWSLNGLVKHVLGKQLLKDKSIRCSNWSNFPLTEDQKLY  206

Qy  264 AATDAYASWHLYKVLKDLPD  283
        |||||||  :| | | |
Db  207 AATDAYAGLIIYQKLGNLGD  226

RESULT 8
US-09-270-767-32220
;  Sequence 32220, Application US/09270767
;  Patent No. 6703491
;  GENERAL INFORMATION:
;  APPLICANT: Homburger et al.
;  TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
;  FILE REFERENCE: File Reference: 7326-094
;  CURRENT APPLICATION NUMBER: US/09/270,767
;  CURRENT FILING DATE: 1999-03-17
;  NUMBER OF SEQ ID NOS: 62517
;  SOFTWARE: PatentIn Ver. 2.0
;  SEQ ID NO 32220
;  LENGTH: 186
;  TYPE: PRT
;  ORGANISM: Drosophila melanogaster
US-09-270-767-32220

Query Match      11.7%;  Score 175;  DB 4;  Length 186;
Best Local Similarity  31.3%;  Pred. No. 3.5e-11;
Matches  46;  Conservative  22;  Mismatches  71;  Indels  8;  Gaps  3;

Qy  139 SFRKGVLPGKVATVQICVDSNYCDVMHIFH-SGIPQSLQHLIEDSTLVKVGIGDGDSVK  197
```

```
Db   1  SFQTG--PGKSAVIQICVDEKCCYIYQLTNVKKLPAALVALINHPKVRLHGVNIKNDFRK  58

Qy  198 LFHDY----GVSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWE  252
        :||:           ||||||||||||||||||||
Db   59 LARDFPBVTAEPLIEKCVDLGLWCNEVCETGGRWSLERLTNFIAKKAMDKSKKVRMSKWH  118

Qy  253 FYPLSKQQLQYAATDAYASWHLYKVLK  279
        :| ||||||||||  :|:|
Db  119 VIPLDENQLMYAAIDVVIGQVIYRELE  145

RESULT 9
US-09-328-352-6289
;  Sequence 6289, Application US/09328352
;  Patent No. 6562958
;  GENERAL INFORMATION:
;  APPLICANT: Gary L. Breton et al.
;  TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
;  TITLE OF INVENTION: BAUMANNI FOR DIAGNOSTICS AND THERAPEUTICS
;  FILE REFERENCE: GTC99-03PA
;  CURRENT APPLICATION NUMBER: US/09/328,352
;  CURRENT FILING DATE: 1999-06-04
;  NUMBER OF SEQ ID NOS: 8252
;  SEQ ID NO 6289
;  LENGTH: 223
;  TYPE: PRT
;  ORGANISM: Acinetobacter baumannii
US-09-328-352-6289

Query Match      11.4%;  Score 169.5;  DB 4;  Length 223;
Best Local Similarity  27.6%;  Pred. No. 1.9e-10;
Matches  45;  Conservative  35;  Mismatches  72;  Indels  11;  Gaps  5;

Qy  129 FVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIP--QSLQHLIEDSTLVK  186
        ||  |      :|   :|:               ::|    ::|:  :::|| |||||||:
Db   58 FLGFDSESKPTFQVGEVSTGPHLIQLATEHK---AYLFHVNLSTLKFLQPILSNPKQIK  113

Qy  187 VGIGIDGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRI  246
        || | |:||  |                ::||:|||||||||:|||||:||||:||||||
Db  114 VGFGLKNDK-HIFHKKGIELESCVDLAK-GFSHFGFKQOMGVQKAVALLGQYIAKSKKV   171

Qy  247 RLGNWEFYPLSKQQLQYAATDAYASWHLYKVLKD---LPDAVS  286
        :  ||  ||  ||  | ||:|||||  | ::|  |     :
Db  172 GTSNWARKPLTSQQISYAAADAYAALLVFLELKKRKVLPIHIS  214

RESULT 10
US-09-248-796A-19082
;  Sequence 19082, Application US/09248796A
;  Patent No. 6747137
;  GENERAL INFORMATION:
;  APPLICANT: Keith Weinstock et al
;  TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICANS
;  TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
;  FILE REFERENCE: 107196.132
;  CURRENT APPLICATION NUMBER: US/09/248,796A
;  CURRENT FILING DATE: 1999-02-12
;  PRIOR APPLICATION NUMBER: US 60/074,725
;  PRIOR FILING DATE: 1998-02-13
;  PRIOR APPLICATION NUMBER: US 60/096,409
;  PRIOR FILING DATE: 1998-08-13
;  NUMBER OF SEQ ID NOS: 28208
;  SEQ ID NO 19082
;  LENGTH: 858
;  TYPE: PRT
;  ORGANISM: Candida albicans
US-09-248-796A-19082

Query Match       6.3%;  Score 94.5;  DB 4;  Length 858;
Best Local Similarity  22.8%;  Pred. No. 0.37;
Matches  45;  Conservative  32;  Mismatches  93;  Indels  27;  Gaps  8;

Qy  31  SSSSSSSAAPTVQATTSVHGHEEDPNQIPNNI----RRQLPR--SITSSTSYKRFPLSR  83
```

APPLICANT: Daley, George Q.
APPLICANT: Cargill, Michele
APPLICANT: Ireland, James S.
APPLICANT: Rozen, Steven G.
TITLE OF INVENTION: CODING SEQUENCE POLYMORPHISMS
TITLE OF INVENTION: IN VASCULAR PATHOLOGY GENES
NUMBER OF SEQUENCES: 59
CORRESPONDENCE ADDRESS:
ADDRSSEE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: MA
COUNTRY: USA
ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/054,272
FILING DATE: 01-APR-1998
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: WHI98-05
TELECOMMUNICATION INFORMATION:
TELEPHONE: 781-861-6240
TELEFAX: 781-861-9540
TELEX:
INFORMATION FOR SEQ ID NO: 38:
SEQUENCE CHARACTERISTICS:
LENGTH: 2224 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-09-054-272-38

Query Match   6.2%;   Score 93;   DB 4;   Length 2224;
Best Local Similarity   19.2%;   Pred. No. 2.4;
Matches   58;   Conservative   42;   Mismatches   124;   Indels   78;   Gaps   11;

```
Qy      4 SNWIDDAFTEEELLAIDAIEASYNFSRSRSSSSSSSAAPTVQATTSVHGHEEDPNQIPNNIR 63
            ::::|| :|: ::        :|: ||    ::  ||| ::::    :: :|
Db    126 ASYLDHTFPAEKM--DDAVAPGREYTYEWSISEDSGPT-------HDDPP--CLTHIY 172

Qy     64 RQLPRSITSSTSYKRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRD 123
            |||||||||| ||||  || || || || ||||||          || | || |||
Db    173 YSHENLIEDFNSGLIGPLLICKK-------GTLTEGGTQKTFDKQIVLLFAVFDESK- 222

Qy    124 ESGIAFVGLDIEWRPSFR----KGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHL 178
            |||| |||||| ||||      ||| | | :|: || :|| : ||  |
Db    223 ------------SWSQSSSLMYTVNGYVNGTMPDITVCA------------HDHISWHLLGM 260

Qy    179 IEDSTLVKVGIGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLT------ 232
            :|:|| ||||||||||| | :|| ||||| ||  :|   ||| :|
Db    261 SSGPEL--FSIHFNGQVLEQNHHKVSAITLVSATSTTANMTVGPEGKWIISSLTPKHLQA 318

Qy    233 ----ETLVCKELLKPNRIRLGNWEFYPLSKQQL-QYAAT------DAYASW 272
            : | |:: | |  |:   | ||  |   |    :|
Db    319 GMQAYIDIKNCPKKTRNLKKITREQRRHMKRWEYFIAAEEVIWDYAPVIPANMDKKYRSQ 378

Qy    273 HL 274
          ||
Db    379 HL 380
```

Db   184 SQASVSLLPPTYQAFHSMHEASSADNDSATNITTPQKRKKQKRLESVTSNTGENELKQLA 243
```
            |::| ||| |||   |::
```
Qy   84 CRARNFPAMRFGGRILY---SKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSF 140
```
               :: |: :: :|  :
```
Db   244 LRSSNIPLSELAQKVKQLENDSTTTSVSLEQSKMKENKETQRLFGMVWLLNSCDLAPT- 302

Qy   141 RKGVLPGK---VATVQICVDSNYCDVMHIFHSGIPQSLQHLIE--DSTLVKVGIGDGDS 195
```
            |:|  |||          ||:|:
```
Db   303 --AVIPRNRIYARYVQVCADNNLAPVS------PASFGKLVKILYPNITTRRLGMRGQS 353

Qy   196 VKLFHDYGVSIKDVEDL 212
```
            :|:|: |:|:
```
Db   354 --KYHYCGIKLTGDENM 368

RESULT 11
US-09-248-796A-18480
; Sequence 18480, Application US/09248796A
; Patent No. 6747137
; GENERAL INFORMATION:
; APPLICANT: Keith Weinstock et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
; TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.132
; CURRENT APPLICATION NUMBER: US/09/248,796A
; CURRENT FILING DATE: 1999-02-12
; PRIOR APPLICATION NUMBER: US 60/074,725
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: US 60/096,409
; PRIOR FILING DATE: 1998-08-13
; NUMBER OF SEQ ID NOS: 28208
; SEQ ID NO 18480: 28208
; LENGTH: 661
; TYPE: PRT
; ORGANISM: Candida albicans
US-09-248-796A-18480

Query Match   6.3%;   Score 93.5;   DB 4;   Length 661;
Best Local Similarity   19.7%;   Pred. No. 0.32;
Matches   71;   Conservative   44;   Mismatches   98;   Indels   147;   Gaps   14;

```
Qy      3 SSNWIDDAFTEEELLAIDAIEASYNFSRSRSSSSSSSAAPTVQATTSVHGHEE-------- 53
            :||||  ||            ||: ||  |||
Db    107 NSNNNNDEDNDIVLLTKD-----NFSRSSSGLGSSGPGSVKRETSASSMAETSKARKKQK 160

Qy     54 ---DP--------NQIPNNIRRQLPRSITSSTSYKRFPLSRCRARNFPAM 92
             :| |        |:| ||:| : |::  |:|
Db    161 SAIDPITGEVNYELILNSLPPNFNDMPYSQRKKLVKSFSESIDYSQFSLF--AKNYLGS 217

Qy     93 RFG-------------------GRILYSKTATEVDKRAMQLIKVL 118
               :||                 ||| ::||:   :
Db    218 SVGSAKTLKWSSSGTGIASASSLSRRNRVGSLNTLAGRLL-ARTSTTDFKKLQQAMKP- 275

Qy    119 DTKRDESGIAFVGLDIEWRPSFRKGVLPGKV-----ATVQICVD------- 157
            ||:     ||:  |:     |
Db    276 KYNVDEKGAIVLGHEL----------GKVIGFGAWGTIRECTDQQDGTIRAIKIVKST 323

Qy    158 ---------------SNYCDVMHIFHSGIPQSLQHLIEDSTLVKVGIGDGDSVKLFH 200
                             :|   |:: :|
Db    324 RDFDGGPGIANHSSGNLNSKTDLTGSMKSKNPRVLEVFKKEIQIWK-------QLHH 373

Qy    201 DYGVSIKDVEDLSD----LANQKIGGD-----KKWGLASLTETLVC--KELLKPNRIRL 248
            |:|:|:||||| |     |    ||||      ||:|||:||:|||   |:| || ||
Db    374 DNILPLIDYYETEDALFCIMNRINGGTLFEVVDSWQQFNARVLICGPLEYLFEEQRHRL 433

RESULT 12
US-09-054-272-38
; Sequence 38, Application US/09054272
; Patent No. 6692909
; GENERAL INFORMATION:
; APPLICANT: Lander, Eric S.
```

RESULT 13
PCT-US94-00198-4
; Sequence 4, Application PCT/US9400198
; GENERAL INFORMATION:
; APPLICANT: Schering Corp.
; TITLE OF INVENTION: RAS Associated GAP Proteins
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schering Corp.
; STREET: 1 Girald Farms
; CITY: Madison
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 94304-1104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: Macintosh
; OPERATING SYSTEM: 6.0.8
; SOFTWARE: Microsoft Word 5.1a
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/00198
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/004,824
; FILING DATE: 15-JAN-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Lunn, Paul G.
; REGISTRATION NUMBER: 32,743
; REFERENCE/DOCKET NUMBER: DX0352 PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (201)822-7255
; TELEFAX: (201)822-7039
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3079 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Saccharomyces cerevisiae
PCT-US94-00198-4

```
Query Match       6.2%;  Score 93; DB 5; Length 3079;
Best Local Similarity  19.3%; Pred. No. 4.1;
Matches  57;  Conservative  43;  Mismatches  112;  Indels  84;  Gaps  10;

Qy     9 DAFTEEELLAIDAIEASYNFSRSRSSSSSSAAPTVQATTSVHGHEEDPNQIPNNIRRQLPR 68
Db  1976 DDFYKTTFLLIDDVLGQLGQPKMEFSN------EIPIYIREHMDDYPELYEFMNRHAFR 2028

Qy    69 SITSSTSY------KRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIK-- 116
Db  2029 NIETSTAYSPSVHESTSSEGIPITLTMSNF--------SDRHVDIDTVAYKFLQIY 2077

Qy   117 -----------VLDTKRDESGIAFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHI 166
Db  2078 ARIWTTKHCLIIDCTEFDEG---GLDMRKFISLVMGLLP-EVAP-KNCIGCYYFNVNET 2131

Qy   167 F-----------HSGIPQSLQHLIEDSTLVKVGIGDGSVKLFHDYGVSIKDVED 211
Db  2132 FMDNYGKCLDKDNVYVSSKIPHYFINSNSDEGLMK-SVGITQGGLKVLQDIRVSLHDITL 2190

Qy   212 LSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAATD 267
Db  2191 YDEKRNR----------------------------FTPVSLKIGDIYFQVLHETPRQYKIRD 2224
```

RESULT 14
US-09-270-767-42422
; Sequence 42422, Application US/09270767
; Patent No. 6703491

; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 42422
; LENGTH: 375
; TYPE: PRT
; ORGANISM: Drosophila melanogaster
; FEATURE:
; OTHER INFORMATION: Xaa means any amino acid
US-09-270-767-42422

```
Query Match       6.2%;  Score 92.5; DB 4; Length 375;
Best Local Similarity  24.4%; Pred. No. 0.17;
Matches  41;  Conservative  24;  Mismatches  48;  Indels  55;  Gaps  8;

Qy    56 NQIPNNIRRQLPRSITSSTSYKR----------FPLSRCRARNFPAMR----FGGRIL 99
Db   149 NQLLNSERRTMTRE--SAVATKRNWAILAAGVGLVYVLVRHRHLLCPLRRVWSFG---- 202

Qy   100 YSKTATEVDKRAMQLIKVL---------DTKRDESGIAFVGLDIEW----RPSFRK 142
Db   203 ----SLVPQRRIEVINSVQDPPTQWVLNELKNHCQTFKVLGFDCEWITVGGSSRRP---- 253

Qy   143 GVLPGKVATVQICVDSNYCDVMHIFH-SGIPQSLQHLIEDSTLVKVGI 189
Db   254 ------VALLQLSSHRGLCALFRLCHMKQIPQDLRDLLEDDAVIKVGV 295
```

RESULT 15
US-09-328-352-4475
; Sequence 4475, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 4475
; LENGTH: 481
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-4475

```
Query Match       6.2%;  Score 92.5; DB 4; Length 481;
Best Local Similarity  21.5%; Pred. No. 0.25;
Matches  46;  Conservative  40;  Mismatches  83;  Indels  45;  Gaps  8;

Qy    63 RRQLPRSITSSTSYKRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKR 122
Db   142 RHRQPLGVVASITPWNWPLMIAVWHIMPALR-AGNVVISKPSEYTPLSTLRLCEIIQQEV 200

Qy   123 DESGIAFV------GLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMIFHSGIPQSLQ 176
Db   201 PAGVISIVGVAGGIGEALSSHPDVQKVVFTGSTRTGQ---------HIM-AGAAQQLK 248

Qy   177 HLI------EDSTLVKVGIGIDGDSVKLFH--------DYGVSIKDV-------- 213
Db   249 HLTLELGGNDAGIVLPDANIDEIADKIFNMAFLNAGQTCAALKRLYVHESQYEALSQKLA 308

Qy   214 DLANQKIGGDKKWGLASLTETLVCKELLKPNRIR 247
Db   309 DIANAQVVGD--GMASSTTFGPVQNQMYNKVK 339
```

Search completed: July 11, 2005, 11:55:36

Job time : 52 secs

This Page Blank (uspto)

OM protein - protein search, using sw model

```
                GenCore version 5.1.6
        Copyright (c) 1993 - 2005 Compugen Ltd.
```

Run on: July 11, 2005, 10:49:54 ; Search time 113 Seconds
                                          (without alignments)
                                          984.633 Million cell updates/sec

Title: US-09-896-186C-24
Perfect score: 1491
Sequence: 1 MSSSNWIDDAFTEEELLAID.........YASWHLYKVLKDLPDAVSGS 288

Scoring table: BLOSUM62
                  Gapop 10.0 , Gapext 0.5

Searched: 1726218 seqs, 386331768 residues

Total number of hits satisfying chosen parameters: 1726218

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                  Maximum Match 100%
                  Listing first 45 summaries

Database :   Published Applications AA:*
  1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
  2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
  3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
  4: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
  5: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
  6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
  7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
  8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
  9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep:*
 10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep:*
 11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep:*
 12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep:*
 16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*
 17: /cgn2_6/ptodata/1/pubpaa/US10E_PUBCOMB.pep:*
 18: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
 19: /cgn2_6/ptodata/1/pubpaa/US11A_PUBCOMB.pep:*
 20: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*
 21: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*
 22: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
```

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | % Query Match | Length | DB | ID | Description |
|---|---|---|---|---|---|---|
| 1 | 1491 | 100.0 | 288 | 10 | US-09-896-186B-24 | Sequence 24, Appl |
| 2 | 1439.5 | 96.5 | 313 | 9 | US-09-906-226-50 | Sequence 50, Appl |
| 3 | 1439.5 | 96.5 | 313 | 10 | US-09-896-186B-2 | Sequence 2, Appli |
| 4 | 676.5 | 45.4 | 290 | 9 | US-09-896-226-16 | Sequence 16, Appl |
| 5 | 666.5 | 44.7 | 268 | 15 | US-10-424-599-227379 | Sequence 227379, |
| 6 | 411 | 27.6 | 256 | 16 | US-10-437-963-118286 | Sequence 118286, |
| 7 | 372.5 | 25.0 | 257 | 16 | US-10-425-115-268420 | Sequence 268420, |
| 8 | 352 | 23.6 | 1405 | 16 | US-10-741-601-299 | Sequence 299, App |
| 9 | 352 | 23.6 | 1405 | 16 | US-10-741-600-847 | Sequence 847, App |
| 10 | 352 | 23.6 | 1405 | 17 | US-10-741-601-300 | Sequence 300, App |
| 11 | 352 | 23.6 | 1406 | 16 | US-10-741-600-848 | Sequence 848, App |
| 12 | 352 | 23.6 | 1432 | 10 | US-09-896-186B-18 | Sequence 18, Appl |
| 13 | 352 | 23.6 | 1432 | 15 | US-10-374-077-71 | Sequence 71, Appl |
| 14 | 352 | 23.6 | 1432 | 16 | US-10-741-601-302 | Sequence 302, App |
| 15 | 352 | 23.6 | 1432 | 17 | US-10-741-600-850 | Sequence 850, App |
| 16 | 352 | 23.6 | 1436 | 16 | US-10-741-601-301 | Sequence 301, App |
| 17 | 352 | 23.6 | 1436 | 17 | US-10-741-600-849 | Sequence 849, App |
| 18 | 330.5 | 22.2 | 643 | 9 | US-09-906-226-49 | Sequence 49, Appl |
| 19 | 330 | 22.1 | 1401 | 15 | US-10-374-077-206 | Sequence 206, App |
| 20 | 270 | 18.1 | 216 | 9 | US-09-906-226-38 | Sequence 38, Appl |
| 21 | 254 | 17.0 | 234 | 9 | US-09-906-226-14 | Sequence 14, Appl |
| 22 | 253.5 | 17.0 | 238 | 15 | US-10-424-599-238476 | Sequence 238476, |
| 23 | 249.5 | 16.7 | 210 | 15 | US-10-425-114-37706 | Sequence 37706, A |
| 24 | 249.5 | 16.7 | 213 | 9 | US-09-906-226-10 | Sequence 10, Appl |
| 25 | 248 | 16.6 | 200 | 16 | US-10-425-115-188902 | Sequence 188902, |
| 26 | 245 | 16.4 | 236 | 15 | US-10-425-114-71107 | Sequence 71107, A |
| 27 | 238 | 16.0 | 197 | 9 | US-09-906-226-12 | Sequence 12, Appl |
| 28 | 238 | 16.0 | 201 | 16 | US-10-437-963-143533 | Sequence 143533, |
| 29 | 236.5 | 15.9 | 234 | 9 | US-09-906-226-4 | Sequence 4, Appli |
| 30 | 229.5 | 15.4 | 210 | 9 | US-09-906-226-40 | Sequence 40, Appl |
| 31 | 229.5 | 15.4 | 211 | 16 | US-10-437-963-145011 | Sequence 145011, |
| 32 | 227 | 15.2 | 202 | 16 | US-10-425-115-337705 | Sequence 337705, |
| 33 | 227 | 15.2 | 210 | 16 | US-10-425-115-337102 | Sequence 337102, |
| 34 | 225.5 | 15.1 | 287 | 16 | US-10-437-963-110472 | Sequence 110472, |
| 35 | 218 | 14.6 | 201 | 9 | US-09-906-226-2 | Sequence 2, Appli |
| 36 | 218 | 14.6 | 204 | 9 | US-09-906-226-24 | Sequence 24, Appl |
| 37 | 218 | 14.6 | 204 | 16 | US-10-425-115-247258 | Sequence 247258, |
| 38 | 212 | 14.2 | 208 | 16 | US-10-424-599-191095 | Sequence 191095, |
| 39 | 191.5 | 12.8 | 571 | 9 | US-09-906-226-42 | Sequence 42, Appl |
| 40 | 188 | 12.6 | 159 | 16 | US-10-437-963-150626 | Sequence 150626, |
| 41 | 188 | 12.6 | 205 | 15 | US-10-424-599-229443 | Sequence 229443, |
| 42 | 182.5 | 12.2 | 621 | 16 | US-10-479-284-18 | Sequence 18, Appl |
| 43 | 181.5 | 12.2 | 572 | 9 | US-09-906-226-32 | Sequence 32, Appl |
| 44 | 179.5 | 12.0 | 582 | 9 | US-09-906-226-55 | Sequence 55, Appl |
| 45 | 179.5 | 12.0 | 582 | 10 | US-09-896-186B-36 | Sequence 36, Appl |

ALIGNMENTS

RESULT 1
US-09-896-186B-24
; Sequence 24, Application US/09896186B
; Publication No.US20030166227A1
; GENERAL INFORMATION:
; APPLICANT: Joshua Z. Levin
; APPLICANT: Ken Phillips
; APPLICANT: Greg Budziszewski
; APPLICANT: Fred Meins
; APPLICANT: Zhenya Glazov
; TITLE OF INVENTION: Methods of Controlling Gene Expression
; FILE REFERENCE: PB/5-31481A
; CURRENT APPLICATION NUMBER: US/09/896,186B
; CURRENT FILING DATE: 2002-04-04
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; LENGTH: 288
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-09-896-186B-24

```
Query Match       100.0%;      Score 1491;  DB 10;  Length 288;
Best Local Similarity 100.0%;  Pred. No. 2e-146;
Matches  288;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy  1 MSSSNWIDDAFTEEELLAIDAIEASYNFSRSRSSSSSSSSAAPTVQATTSVHGHEEDPNQIPN 60
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  1 MSSSNWIDDAFTEEELLAIDAIEASYNFSRSRSSSSSSSSAAPTVQATTSVHGHEEDPNQIPN 60

Qy 61 NIRRQLPRSITSTSYKRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVLDT 120
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 NIRRQLPRSITSTSYKRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVLDT 120
```

```
Qy  121 KRDESGIAFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHLIE 180
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  121 KRDESGIAFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHLIE 180

Qy  181 DSTLVKVGIGIDGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKEL 240
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  181 DSTLVKVGIGIDGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKEL 240

Qy  241 LKPNRIRLGNWEFYPLSKQQLQYAATDAYASWHLYKVLKDLPDAVSGS 288
        |||||||||||||||||||||||||||||||||||||||||||||||
Db  241 LKPNRIRLGNWEFYPLSKQQLQYAATDAYASWHLYKVLKDLPDAVSGS 288
```

RESULT 2
US-09-906-226-50
; Sequence 50, Application US/09906226
; Publication No. US2002008026A1
; GENERAL INFORMATION:
; APPLICANT: Butler, Karla
; APPLICANT: Cahoon, Rebecca E.
; APPLICANT: Rafalski, Antoni
; APPLICANT: Sakai, Hajime
; TITLE OF INVENTION: Plant RNaseD-Like Genes
; FILE REFERENCE: BB1467 US NA
; CURRENT APPLICATION NUMBER: US/09/906,226
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 60/218993
; PRIOR FILING DATE: July 17, 2000
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: Microsoft Office 97
; SEQ ID NO 50
; LENGTH: 313
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-09-906-226-50

Query Match   96.5%; Score 1439.5; DB 9; Length 313;
Best Local Similarity   95.3%; Pred. No. 5.4e-141;
Matches 281; Conservative   1; Mismatches   4; Indels   9; Gaps   1;

```
Qy    1 MSSSNWIDDAFTEEELLAIDAIEASYNFSRSRSSSSSSAAPTVQATTSVHGHEEDPNQIPN 60
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1 MSSSNWIDDAFTEEELLAIDAIEASYNFSRSRSSSSSSAAPTVQATTSVHGHEEDPNQIPN 60

Qy   61 NIRRQLPRSITSSTSYKRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVLDT 120
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   61 NIRRQLPRSITSSTSYKRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVLDT 120

Qy  121 KRDESGIAFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHLIE 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  121 KRDESGIAFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHLIE 180

Qy  181 DSTLVKVGIGIDGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKEL 240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  181 DSTLVKVGIGIDGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKEL 240

Qy  241 LKPNRIRLGNWEFYPLSKQQLQYAATDAYASWHLYKV-------LKDLPDAVS 286
        ||||||||||||||||||||||||||||||||||||        ||  |:
Db  241 LKPNRIRLGNWEFYPLSKQQLQYAATDAYASWHLYKVTTTKNHLLTLNDLEAKIS 295
```

RESULT 3
US-09-896-186B-2
; Sequence 2, Application US/09896186B
; Publication No. US20030166227A1
; GENERAL INFORMATION:
; APPLICANT: Joshua Z. Levin
; APPLICANT: Ken Phillips
; APPLICANT: Greg Budziszewski
; APPLICANT: Fred Meins
; APPLICANT: Zhenya Glazov
; TITLE OF INVENTION: Methods of Controlling Gene Expression
; FILE REFERENCE: PB/5-31481A

; CURRENT APPLICATION NUMBER: US/09/896,186B
; CURRENT FILING DATE: 2002-04-04
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 313
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-09-896-186B-2

Query Match   96.5%; Score 1439.5; DB 10; Length 313;
Best Local Similarity   95.3%; Pred. No. 5.4e-141;
Matches 281; Conservative   1; Mismatches   4; Indels   9; Gaps   1;

```
Qy    1 MSSSNWIDDAFTEEELLAIDAIEASYNFSRSRSSSSSSAAPTVQATTSVHGHEEDPNQIPN 60
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1 MSSSNWIDDAFTEEELLAIDAIEASYNFSRSRSSSSSSAAPTVQATTSVHGHEEDPNQIPN 60

Qy   61 NIRRQLPRSITSSTSYKRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVLDT 120
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   61 NIRRQLPRSITSSTSYKRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVLDT 120

Qy  121 KRDESGIAFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHLIE 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  121 KRDESGIAFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHLIE 180

Qy  181 DSTLVKVGIGIDGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKEL 240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  181 DSTLVKVGIGIDGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLTETLVCKEL 240

Qy  241 LKPNRIRLGNWEFYPLSKQQLQYAATDAYASWHLYKV-------LKDLPDAVS 286
        ||||||||||||||||||||||||||||||||||||        ||  |:
Db  241 LKPNRIRLGNWEFYPLSKQQLQYAATDAYASWHLYKVTTTKNHLLTLNDLEAKIS 295
```

RESULT 4
US-09-906-226-16
; Sequence 16, Application US/09906226
; Publication No. US2002008026A1
; GENERAL INFORMATION:
; APPLICANT: Butler, Karla
; APPLICANT: Cahoon, Rebecca E.
; APPLICANT: Rafalski, Antoni
; APPLICANT: Sakai, Hajime
; TITLE OF INVENTION: Plant RNaseD-Like Genes
; FILE REFERENCE: BB1467 US NA
; CURRENT APPLICATION NUMBER: US/09/906,226
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 60/218993
; PRIOR FILING DATE: July 17, 2000
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: Microsoft Office 97
; SEQ ID NO 16
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Glycine max
US-09-906-226-16

Query Match   45.4%; Score 676.5; DB 9; Length 290;
Best Local Similarity   49.3%; Pred. No. 1.6e-61;
Matches 139; Conservative 49; Mismatches 63; Indels 31; Gaps   6;

```
Qy    9 DAFTEEELLAIDAIEASYNFSRSRSSSSSSAAPTVQATTSVHGHEEDPNQIPNNIRRQLPR 68
        :||:|::|:|||                  ||||||||||||||||||||||||||||||:
Db   18 EPLTEDDLEAIEA---------SLSNNKKRP------FNDHTHTP-------RRRLPK 53

Qy   69 SI----TSSTSYKRFPLSRCRAR-NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKR 122
        |:     ::: | :|::::: :  ::|  : :::::::|:  :|: ::|| ||:|:| ::
Db   54 SLIALQHPNASSFSPHP-RPCDSRMTLPVMKFSGQISYSRTFDAVEKAATKLLQILQEKT 112

Qy  123 DESGIAFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHLIEDS 182
        ::  ||:|:|||||:|:|||||:||||||:||||  :  |:|:||:||||||:||:||ED
Db  113 TDMMQTAIGFDIEWKPTFRKGVPPGKVAVMQICGDTRHCHVLHIHSGIPQNLQLLLLEDP 172
```

```
Qy    183 TLVKVGIGIDGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLTETIVCKELLK 242
          |:|||| |||||||||||:||:|| |||||||||||||||||||:|:||
Db    173 TVLKVGAGIDGDAVKVFRDYNISVKGVTDLSFHANQKLGGDHKWGLASLTEKLLSKQLKK 232

Qy    243 PNRIRLGNWEFYPLSKQQLQYAATDAYASWHLYKVLKDLPDA 284
          ||:||||||| |||:|||:|||||||||||| |::|||||
Db    233 PNKIRLGNWEAPVLSKEQLEYAATDAFASWCLYQAIKDLPDA 274

RESULT 5
US-10-424-599-227379
; Sequence 227379, Application US/10424599
; Publication No. US2004031072A1
; GENERAL INFORMATION:
;   APPLICANT: La Rosa Thomas J
;   APPLICANT: Kovalic David K
;   APPLICANT: Zhou Yihua
;   APPLICANT: Cao Yongwei
;   TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
;   TITLE OF INVENTION:  Plants and Uses Thereof for Plant Improvement
;   FILE REFERENCE: 38-21(53223)B
;   CURRENT APPLICATION NUMBER: US/10/424,599
;   CURRENT FILING DATE: 2003-04-28
;   NUMBER OF SEQ ID NOS: 285684
;   SEQ ID NO 227379
;   LENGTH: 268
;   TYPE: PRT
;   ORGANISM: Glycine max
;   FEATURE:
;   OTHER INFORMATION: Clone ID: PAT_MRT3847_47352C.1.pep
US-10-424-599-227379

Query Match             44.7%;  Score 666.5;  DB 15;  Length 268;
Best Local Similarity   51.1%;  Pred. No. 1.6e-60;
Matches  134;  Conservative  46;  Mismatches  61;  Indels  21;  Gaps  5;

Qy     29 SRSSSSSSAAPTVQATTSVHGHEEDPNQIPNNIRRQLPRSI-----TSSTSYKRFPLSR 83
          |:|||||| :    |:|||||||| |||:||:|||||||| |||| :||||||
Db      6 SEASLSNNKKRP------FNDHTHTP------RRRLPKSLIALQHPNASSFSPHP-RP 50

Qy     84 CRAR-NFPAMRFGGRIILYSKTATEVDKRAMQLIKVLVDTKRDESGIAFVGLDIEWRPSFRK 142
          |    |||:||| |||:|:|||| |:||| ||||:||||||
Db     51 CDSRMTLPVMKFSGQISYSRTFDAVEKAATKLLQILQEKTTDMMQTAIGFDIEWKPTPRK 110

Qy    143 GVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLVKVGIGIDGDSVKLFHDY 202
          |:|||||| || ||||:| ||| | ||||:||| |:|||||||||
Db    111 GVPPGKVAVMQICGDTRHCHVLHLIHSGIPQNLQLLEDPTVLKVGAGIDGDAVKVFRDY 170

Qy    203 GVSIKDVEDLSDLANQKIGGDKKWGLASLTETIVCKELLKPNRIRLGNWEFYPLSKQQLQ 262
          ||||||||||||||| |||||||||||||| |:||| ||:||||||||||:|||||:|
Db    171 NISVKGVTDLSFHANQKLGGDHKWGLASLTEKLLSKQLKKPNKIRLGNWEAPVLSKEQLE 230

Qy    263 YAATDAYASWHLYKVLKDLPDA 284
          |||||||||| |::|||||
Db    231 YAATDAFASWCLYQAIKDLPDA 252

RESULT 6
US-10-437-963-118286
; Sequence 118286, Application US/10437963
; Publication No. US2004012343A1
; GENERAL INFORMATION:
;   APPLICANT: La Rosa, Thomas J.
;   APPLICANT: Kovalic, David K.
;   APPLICANT: Zhou, Yihua
;   APPLICANT: Cao, Yongwei
;   APPLICANT: Wu, Wei
;   APPLICANT: Boukharov, Andrey A.
;   APPLICANT: Barbazuk, Brad
;   APPLICANT: Li, Ping
;   TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
;   TITLE OF INVENTION:  Plants and Uses Thereof for Plant Improvement
```

```
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 118286
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_21612C.1.pep
US-10-437-963-118286

Query Match             27.6%;  Score 411;  DB 16;  Length 256;
Best Local Similarity   37.2%;  Pred. No. 6.2e-34;
Matches  103;  Conservative  36;  Mismatches  76;  Indels  62;  Gaps  7;

Qy      9 DAFTEEELLAIDAIEASYNFSRSSSSSSSAAPTVQATTSVQGH-EEDPNQIPNNIRRQLP 67
          |:|:|:|| |: ||| :|||||||||||||||   :|
Db     27 DAEAEAELQAIEAAYAAAKRRRLPDWPSPNPVTASASASASGGCSPAPPWAP-------- 78

Qy     68 RSITSSTSYKRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVLVDTKRDESGI 127
          : ||  |:  || | :  ||  || |:::|:::|:
Db     79 ----SPPAFR---GNVKARYQPVM-FNGSIVVCRTPSKVEKATRDILCKIETMK-ASGQ 128

Qy    128 AFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHLIEDSTLVKV 187
          :|:|||| :|| |:
Db    129 VSLGFDLEWRPFPRR-----------------------------------VQV 146

Qy    188 GIGIDGDSVKLFHDYGVSIKDVEDLSDLANQKIG-GDKKWGLASLTETLVCKELLKPNRI 246
          |||||||:|:||| : :|:|:|||||| |:||  |||:||||||:|:|:|||||:||||
Db    147 GICIDNDARKMFNDYDVHVQPLMDLSNLANAKLGFPPKRWSLASLTEMVTCRELPKPSNI 206

Qy    247 RLGNWEFYPLSKQQLQYAATDAYASWHLYKVLKDLPD 283
          :|:||||||||||||||||||||||:||::|  |:||
Db    207 RMGNWEAVVLSKQQLQYAATDAYISWHLYEVLQSLPD 243

RESULT 7
US-10-425-115-268420
; Sequence 268420, Application US/10425115
; Publication No. US2004021427A1
; GENERAL INFORMATION:
;   APPLICANT: La Rosa, Thomas J.
;   APPLICANT: Kovalic, David K.
;   APPLICANT: Zhou, Yihua
;   APPLICANT: Cao, Yongwei
;   TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
;   TITLE OF INVENTION: Plants
; FILE REFERENCE: 38-21(53222)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 268420
; LENGTH: 257
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: MRT4577_1763C.1.pep
US-10-425-115-268420

Query Match             25.0%;  Score 372.5;  DB 16;  Length 257;
Best Local Similarity   38.5%;  Pred. No. 6.4e-30;
Matches   92;  Conservative  41;  Mismatches  81;  Indels  25;  Gaps  8;

Qy      5 NWIDDAFTEEELLAIDAIEASYNFS---RSSSSSSSAAPTVQATTSVHGHEEDPNQIPNN 61
          : |:||::||  |: ||| ::||:       ::::|
Db     38 HW-DDA-AEAELQAFEAAYASASASAKRRLPDWTSPSP----SPSYHLH--------- 81

Qy     62 IRRQLPRITSTSTSY---KRFPLSRCRARNFPAMRFGGRILYSKTATEVDKRAMQLIKVL 118
          | |:|   |::||:     :|| | ::  ||  ||  |::
Db     82 -RSQNPVSSGSTPSWTLTPHTPQDNVRARR-QQISFSGKIVVCRTPTEAEKAATDILLKI 139

Qy    119 DTKRDESGIAFVGLDIEWRPSFRKGVLPGKVATVQICVDSNYCDVMHIFHSGIPQSLQHL 178
```

```
Db  140 ERMRTPGQVS-LGFDLEWRPFPRRGEPPCKVAVMQLCMEKTLCYLLHIAHSGVPPLLKTL 198
            :  :| |||||| |:|  |:|.|.:               |||| |:|.:
Db  179 IEDSTLVKVGIGDGDSVKLFHDYGVSIKDVEDLSDLANQKIGGDKKWGLASLTETLVC 237
            :|||:|||| |:|.: | :  |:|::  |||| ||:|||||||||| |||||||:
Db  199 LEDSSSIKVGICIDNDARKMLNDYNVCVQPLMDLSTLANVKLLASPKRWSLASLTEMITC 257
```

RESULT 8
US-10-741-601-299
; Sequence 299, Application US/10741601
; Publication No. US20040166519A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001500
; CURRENT APPLICATION NUMBER: US/10/741,601
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 26415
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 299
; LENGTH: 1405
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-741-601-299

```
Query Match              23.6%;  Score 352;  DB 16;  Length 1405;
Best Local Similarity    37.7%;  Pred. No. 1.1e-26;
Matches   75;  Conservative  41;  Mismatches  75;  Indels  8;  Gaps  3;

Qy   88 NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
            :  :| || ::||   |:  .  :.::|| :| .:|||::||
Db   43 DLPFLEFTGSIVYSYDASDCSFLSE-----DISMSLSDGDVVGFDMEWPPLYNRGKL-G 95

Qy  148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTIVKVGIGDGDSVKLFHDYGVSI 206
        |||: |:|.|:.: ||: ||.|: :|:| ||:|||||||:|||| |:||||||||||||
Db   96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy  207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
        |: |:||:|.|||.|| ||| |:||:|.||  :|  || |||||| ||| ::|||:|||||
Db  156 KNFVELTDVANKKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy  267 DAYASWHLYKVLKDLPDAV 285
        |||| .|:||: |: | |
Db  216 DAYAGFIIYRNLEILDDTV 234
```

RESULT 9
US-10-741-600-847
; Sequence 847, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 847
; LENGTH: 1405
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-741-600-847

```
Query Match              23.6%;  Score 352;  DB 17;  Length 1405;
Best Local Similarity    37.7%;  Pred. No. 1.1e-26;
Matches   75;  Conservative  41;  Mismatches  75;  Indels  8;  Gaps  3;

Qy   88 NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
            :  :| || ::|||  |: :.  :.::|| :| .: ||
Db   43 DLPFLEFTGSIVYSYDASDCSFLSE-----DISMSLSDGDVVGFDMEWPPLYNRGKL-G 95

Qy  148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGDSVKLFHDYGVSI 206
        |||: |:|.|:.: ||: ||.|: :|:| ||:||||||||||| |:||||||||||||
Db   96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy  207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
        |: |:||:|.|||.|| ||| |:||:|.|| :|  || |||||| ||| ::|||:|||||
Db  156 KNFVELTDVANKKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy  267 DAYASWHLYKVLKDLPDAV 285
        |||| .|:||: |: | |
Db  216 DAYAGFIIYRNLEILDDTV 234
```

RESULT 10
US-10-741-601-300
; Sequence 300, Application US/10741601
; Publication No. US20040166519A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001500
; CURRENT APPLICATION NUMBER: US/10/741,601
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 26415
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 300
; LENGTH: 1406
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-741-601-300

```
Query Match              23.6%;  Score 352;  DB 16;  Length 1406;
Best Local Similarity    37.7%;  Pred. No. 1.1e-26;
Matches   75;  Conservative  41;  Mismatches  75;  Indels  8;  Gaps  3;

Qy   88 NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
            :  :| || ::|||  |: :.  :.::|| :| .: ||
Db   43 DLPFLEFTGSIVYSYDASDCSFLSE-----DISMSLSDGDVVGFDMEWPPLYNRGKL-G 95

Qy  148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGDSVKLFHDYGVSI 206
        |||: |:|.|:.: ||: ||.|: :|:| ||:||||||||||| |:||||||||||||
Db   96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy  207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
        |: |:||:|.|||.|| ||| |:||:|.|| :|  || |||||| ||| ::|||:|||||
Db  156 KNFVELTDVANKKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy  267 DAYASWHLYKVLKDLPDAV 285
        |||| .|:||: |: | |
Db  216 DAYAGFIIYRNLEILDDTV 234
```

RESULT 11
US-10-741-600-848
; Sequence 848, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 848
; LENGTH: 1406
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-741-600-848

Query Match   23.6%;   Score 352;   DB 17;   Length 1406;
Best Local Similarity   37.7%;   Pred. No. 1.1e-26;
Matches   75;   Conservative   41;   Mismatches   75;   Indels   8;   Gaps   3;

```
Qy   88 NFPAMRFGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
          : :|:||::||: |:: :||: :  :||:|||:|:
Db   43 DLPFLEFTGSIVYSYDASDCSFLSE-----DISMSLSDGDVVGFDMEWPPLYNRGKL-G 95

Qy  148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGIDGDSVKLFHDYGVSI 206
        ||| :||:|:  :::  : ||::   :|:||| :|: :: :
Db   96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy  207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
        |: :|||::||:  ||:||  | |:|||:| |:||: :||||
Db  156 KNFVELTDVANKKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy  267 DAYASWHLYKVLKDLPDAV 285
        |||:  :|:||:|::|
Db  216 DAYAGFIIYRNLEILDDTV 234
```

RESULT 12
US-09-896-186B-18
; Sequence 18, Application US/0986186B
; Publication No. US20030166227A1
; GENERAL INFORMATION:
; APPLICANT: Joshua Z. Levin
; APPLICANT: Ken Phillips
; APPLICANT: Greg Budziszewski
; APPLICANT: Fred Meins
; APPLICANT: Zhenya Glazov
; TITLE OF INVENTION: Methods of Controlling Gene Expression
; FILE REFERENCE: PB/5-31481A
; CURRENT APPLICATION NUMBER: US/09/896,186B
; CURRENT FILING DATE: 2002-04-04
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn Ver. 2.1
;
; SEQ ID NO 18
; LENGTH: 1432
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-896-186B-18

Query Match   23.6%;   Score 352;   DB 10;   Length 1432;
Best Local Similarity   37.7%;   Pred. No. 1.1e-26;
Matches   75;   Conservative   41;   Mismatches   75;   Indels   8;   Gaps   3;

```
Qy   88 NFPAMRFGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
          : :|:||::||: |:: :||: :  :||:|||:|:
Db   43 DLPFLEFTGSIVYSYDASDCSFLSE-----DISMSLSDGDVVGFDMEWPPLYNRGKL-G 95

Qy  148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGIDGDSVKLFHDYGVSI 206
        ||| :||:|:  :::  : ||::   :|:||| :|: :: :
Db   96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy  207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
        |: :|||::||:  ||:||  | |:|||:| |:||: :||||
Db  156 KNFVELTDVANKKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy  267 DAYASWHLYKVLKDLPDAV 285
        |||:  :|:||:|::|
Db  216 DAYAGFIIYRNLEILDDTV 234
```

RESULT 13
US-10-374-077-71
; Sequence 71, Application US/10374077
; Publication No. US20040006779A1
; GENERAL INFORMATION:
; APPLICANT: Fu, Ying-Hui
;   Yu, Chang-En
;   Oshima, Junko
;

Mulligan, John T.
Schellenberg, Gerald D.
TITLE OF INVENTION: ANTIBODIES AGAINST GENE PRODUCTS RELATED TO
WERNER'S SYNDROME
NUMBER OF SEQUENCES: 209
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/374,077
FILING DATE: 25-Feb-2003
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Rosenman, Stephen
REGISTRATION NUMBER: 43,058
REFERENCE/DOCKET NUMBER: 100107.401D1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 1432 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 71:
US-10-374-077-71

Query Match   23.6%;   Score 352;   DB 15;   Length 1432;
Best Local Similarity   37.7%;   Pred. No. 1.1e-26;
Matches   75;   Conservative   41;   Mismatches   75;   Indels   8;   Gaps   3;

```
Qy   88 NFPAMRFGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
          : :|:||::||: |:: :||: :  :||:|||:|:
Db   43 DLPFLEFTGSIVYSYDASDCSFLSE-----DISMSLSDGDVVGFDMEWPPLYNRGKL-G 95

Qy  148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGIDGDSVKLFHDYGVSI 206
        ||| :||:|:  :::  : ||::   :|:||| :|: :: :
Db   96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy  207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
        |: :|||::||:  ||:||  | |:|||:| |:||: :||||
Db  156 KNFVELTDVANKKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy  267 DAYASWHLYKVLKDLPDAV 285
        |||:  :|:||:|::|
Db  216 DAYAGFIIYRNLEILDDTV 234
```

RESULT 14
US-10-741-601-302
; Sequence 302, Application US/10741601
; Publication No. US20040166519A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001500
; CURRENT APPLICATION NUMBER: US/10/741,601
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 26415
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 302
; LENGTH: 1432

```
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-741-601-302

Query Match             23.6%;    Score 352; DB 16;  Length 1432;
Best Local Similarity   37.7%;    Pred. No. 1.1e-26;
Matches    75;  Conservative   41;  Mismatches   75;  Indels   8;  Gaps   3;

Qy     88 NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
          : .:::|||||:|||| |::.          :         ||:::|::|.:|.:|—|
Db     43 DLPFLEFTGSIVYSYDASDCSFLSE------DISMSLSDGDVVGFDMEWPPLYNRGKL-G  95

Qy    148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGDSVKLFHDYGVSI 206
          |||.:|:|| . :.:.:.  : |||.:| : ||.:|:::||.:.|:: : :
Db     96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy    207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
          |: .:.:|:.||::|. :.|     |:|::  .:||::  .:|::|:: —:||||
Db    156 KNFVELTDVANKKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy    267 DAYASWHLYKVLKDLPDAV 285
          |||| |: |:.|:|—|
Db    216 DAYAGFIIYRNLEILDDTV 234


RESULT 15
US-10-741-600-850
; Sequence 850, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
;    APPLICANT: CARGILL, Michele et al.
;    TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
;    TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
;    FILE REFERENCE: CL001499
;    CURRENT APPLICATION NUMBER: US/10/741,600
;    CURRENT FILING DATE: 2003-12-22
;    NUMBER OF SEQ ID NOS: 73997
;    SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 850
;    LENGTH: 1432
;    TYPE: PRT
;    ORGANISM: Homo sapiens
US-10-741-600-850

Query Match             23.6%;    Score 352; DB 17;  Length 1432;
Best Local Similarity   37.7%;    Pred. No. 1.1e-26;
Matches    75;  Conservative   41;  Mismatches   75;  Indels   8;  Gaps   3;

Qy     88 NFPAMRFGGRILYSKTATEVDKRAMQLIKVLDTKRDESGIAFVGLDIEWRPSFRKGVLPG 147
          : .:::|||||:|||| |::.          :         ||:::|::|.:|.:|—|
Db     43 DLPFLEFTGSIVYSYDASDCSFLSE------DISMSLSDGDVVGFDMEWPPLYNRGKL-G  95

Qy    148 KVATVQICVDSNYCDVMHIFHSGI-PQSLQHLIEDSTLVKVGIGDGDSVKLFHDYGVSI 206
          |||.:|:|| . :.:.:.  : |||.:| : ||.:|:::||.:.|:: : :
Db     96 KVALIQLCVSESKCYLFHVSSMSVFPQGLKMLLENKAVKKAGVGIEGDQWKLLRDFDIKL 155

Qy    207 KDVEDLSDLANQKIGGDKKWGLASLTETLVCKELLKPNRIRLGNWEFYPLSKQQLQYAAT 266
          |: .:.:|:.||::|. :.|     |:|::  .:||::  .:|::|:: —:||||
Db    156 KNFVELTDVANKKLKCTETWSLNSLVKHLLGKQLLKDKSIRCSNWSKFPLTEDQKLYAAT 215

Qy    267 DAYASWHLYKVLKDLPDAV 285
          |||| |: |:.|:|—|
Db    216 DAYAGFIIYRNLEILDDTV 234


Search completed: July 11, 2005, 12:05:10
Job time : 115 secs
```

```
                 GenCore version 5.1.6

        Copyright (c) 1993 - 2005  Compugen Ltd.


OM nucleic - nucleic search, using sw model

Run on:   July 11, 2005, 08:04:33 ; Search time 5293 Seconds
                               (without alignments)
                           1244.278 Million cell updates/sec

Title:       US-09-896-186C-23
Perfect score: 1049
Sequence:    1 accaaagcattaattttat.......tttaaccgtccagaaactag 1049

Scoring table: IDENTITY NUC
             Gapop 10.0 , Gapext 1.0

Searched:     630945 seqs, 3139162390 residues

Total number of hits satisfying chosen parameters:    12661890

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :    Published Applications NA:*
           1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
           2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
           3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
           4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
           5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
           6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
           7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
           8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
           9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
          10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
          11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
          12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
          13: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
          14: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
          15: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
          16: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
          17: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
          18: /cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq:*
          19: /cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq:*
          20: /cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq:*
          21: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq:*
          22: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
          23: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq:*
          24: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*
          25: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
          26: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*
```

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Match	Length	DB	ID	Description
1	1049	100.0	1049	1049	10	US-09-896-186B-23	Sequence 23, Appl
2	831	79.2	942	942	10	US-09-896-186B-1	Sequence 1, Appli
3	276.2	26.3	1170	1170	9	US-09-906-226-15	Sequence 15, Appl
4	276.2	26.3	1253	1253	18	US-10-424-599-84537	Sequence 84537, A
5	112.2	10.7	5765	5765	19	US-10-741-601-18	Sequence 18, Appl
6	112.2	10.7	5765	5765	21	US-10-741-600-22	Sequence 22, Appl
7	112.2	10.7	6428	6428	19	US-10-741-601-15	Sequence 15, Appl

8	112.2	10.7	6428	21	US-10-741-600-19	Sequence 19, Appl
9	112.2	10.7	6431	19	US-10-741-601-16	Sequence 16, Appl
10	112.2	10.7	6431	21	US-10-741-600-20	Sequence 20, Appl
11	112.2	10.7	6521	19	US-10-741-601-17	Sequence 17, Appl
12	112.2	10.7	6521	21	US-10-741-600-21	Sequence 21, Appl
13	111	10.6	4299	10	US-09-896-186B-17	Sequence 17, Ap
14	111	10.6	5189	9	US-09-954-456-1131	Sequence 1131, Appl
15	111	10.6	5189	9	US-09-292-758-31	Sequence 31, Appl
16	111	10.6	5189	17	US-10-843-641A-4158	Sequence 4158, Ap
17	111	10.6	5208	17	US-10-374-077-70	Sequence 70, Appl
18	111	10.6	5208	21	US-10-467-182-11	Sequence 11, Appl
19	109.8	10.5	800	20	US-10-425-115-83757	Sequence 83757, A
20	105.8	10.1	824	19	US-10-437-963-15803	Sequence 15803, A
21	95.6	9.1	724	18	US-10-424-599-86601	Sequence 86601, A
22	81.2	7.7	4792	17	US-10-374-077-205	Sequence 205, App
23	56	5.3	1047	9	US-09-906-226-37	Sequence 37, Appl
24	55.4	5.3	201	19	US-10-741-601-806	Sequence 806, App
25	55.4	5.3	201	19	US-10-741-601-822	Sequence 822, App
26	55.4	5.3	201	19	US-10-741-601-838	Sequence 838, App
27	55.4	5.3	201	19	US-10-741-601-859	Sequence 859, App
28	55.4	5.3	201	21	US-10-741-600-2988	Sequence 2988, Ap
29	55.4	5.3	201	21	US-10-741-600-3004	Sequence 3004, Ap
30	55.4	5.3	201	21	US-10-741-600-3020	Sequence 3020, Ap
31	55.4	5.3	201	21	US-10-741-600-3043	Sequence 3043, Ap
32	55.4	5.3	98844	21	US-10-467-182-10	Sequence 10, Appl
33	55.4	5.3	151870	19	US-10-741-601-5614	Sequence 5614, Ap
34	55.4	5.3	151870	21	US-10-741-600-17561	Sequence 17561, A
35	51.2	4.9	610	18	US-10-424-599-76746	Sequence 76746, A
36	51.2	4.9	29604	17	US-10-374-077-207	Sequence 207, App
37	44.4	4.2	449	18	US-10-276-774-284	Sequence 284, App
38	44.4	4.2	2303	19	US-10-479-284-50	Sequence 50, Appl
39	44.4	4.2	3149	9	US-09-729-674-127	Sequence 127, App
40	44.4	4.2	3149	21	US-10-913-553-127	Sequence 127, Appl
41	42.8	4.1	408	21	US-10-275-323A-13	Sequence 13, Appl
42 c	41.4	3.9	941	14	US-10-123-155-464	Sequence 464, App
43 c	41.4	3.9	941	15	US-10-146-731-464	Sequence 464, App
44 c	41.4	3.9	941	15	US-10-140-472-464	Sequence 464, App
45 c	41.4	3.9	941	15	US-10-141-761-464	Sequence 464, App

ALIGNMENTS

```
RESULT 1
US-09-896-186B-23
; Sequence 23, Application US/0896186B
; Publication No. US20030166227A1
; GENERAL INFORMATION:
;  APPLICANT: Joshua Z. Levin
;  APPLICANT: Ken Phillips
;  APPLICANT: Greg Budziszewski
;  APPLICANT: Fred Meins
;  APPLICANT: Zhenya Glazov
;  TITLE OF INVENTION: Methods of Controlling Gene Expression
;  FILE REFERENCE: PB/5-31481A
;  CURRENT APPLICATION NUMBER: US/09/896,186B
;  CURRENT FILING DATE: 2002-04-04
;  NUMBER OF SEQ ID NOS: 38
;  SOFTWARE: PatentIn Ver. 2.1
;  SEQ ID NO 23
;  LENGTH: 1049
;  TYPE: DNA
;  ORGANISM: Arabidopsis thaliana
US-09-896-186B-23

  Query Match             100.0%;  Score 1049;  DB 10;  Length 1049;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-290;
  Matches 1049;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy        1 ACCAAAGCATTAATTTTTATTTTTTTGTTTCAGTAAAAGAAATGTCATCGTCAAATTGGA 60
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1 ACCAAAGCATTAATTTTTATTTTTTTGTTTCAGTAAAAGAAATGTCATCGTCAAATTGGA 60
```

Query Match   79.2%; Score 831; DB 10; Length 942;
Best Local Similarity   96.1%; Pred. No. 1.3e-227;
Matches   852; Conservative   0; Mismatches   35; Indels   0; Gaps   0;

```
Qy   42 ATGTCATCGTCAAATTGGATCACGACGAGCTTTACAGAGGAGGAGCTTCTCCGTCATCGAC 101
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1 ATGTCATCGTCAAATTGGATCACGACGAGCTTTACAGAGGAGGAGCTTCTCCGTCATCGAC  60

Qy  102 GCCATCGAAGCTTCCTACAATTCTCCCGTCTTCTTCTTCTTCCTTCCTCTGCTCCG 161
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   61 GCCATCGAAGCTTCCTACAATTCTCCCGTCTTCTTCTTCTTCCTTCCTCTGCTCCG 120

Qy  162 ACCGTACAAGCTACAACCTCCGTCCATGGCCACGAGGAGGATCAAATCAAATCCCCAAT 221
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  121 ACCGTACAAGCTACAACCTCCGTCCATGGCCACGAGGAGGATCAAATCAAATCCCCAAT 180

Qy  222 AATATCCGTCGCCAATTGCCTCGTCCATCACTTCTTCCTACATCTTATAAACGATTCCT 281
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  181 AATATCCGTCGCCAATTGCCTCGTCCATCACTTCTTCCTACATCTTATAAACGATTCCT 240

Qy  282 CTCTCCCGTTGCCGAGCTAGGAGAATTTCCAGCAATGAGGTTGGTGTGGGAGGATTTGTAT 341
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  241 CTCTCCCGTTGCCGAGCTAGGAGAATTTCCAGCAATGAGGTTGGTGTGGGAGGATTTGTAT 300

Qy  342 AGCAAGACTGCTACGAGGTTGATAAGGAGCAATGCAATGCAGCTTATTAAAGTTCTTGATACC 401
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  301 AGCAAGACTGCTACGAGGTTGATAAGGAGCAATGCAATGCAGCTTATTAAAGTTCTTGATACC 360

Qy  402 AAGAGAGATGAATCTGAATAGCTTTGTTGGCTTGGATAATTGAGTGGAGACCAAGTTTT 461
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  361 AAGAGAGATGAATCTGAATAGCTTTGTTGGCTTGGATAATTGAGTGGAGACCAAGTTTT 420

Qy  462 AGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCCAGATATGTAGATAGTGTAATTAT 521
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  421 AGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCCAGATATGTAGATAGTGTAATTAT 480

Qy  522 TGTGATGTTATGCATATTTTCATTCTGTATCCCTCAAAGTCTCCAACATCTTATTGAA 581
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  481 TGTGATGTTATGCATATTTTCATTCTGTATCCCTCAAAGTCTCCAACATCTTATTGAA 540

Qy  582 GATTCAACACTTGTAAAGTAGTTAGTTAGTGGAATTGGAATTGTGAAGTGACTCTGTGAAGCTTTCCAT 641
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  541 GATTCAACACTTGTAAAGTAGTTAGTTAGTGGAATTGGAATTGTGAAGTGACTCTGTGAAGCTTTCCAT 600

Qy  642 GACTATGGAGTTAGTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCCAACCAAAAAAATT 701
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  601 GACTATGGAGTTAGTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCCAACCAAAAAAATT 660

Qy  702 GGTGGAGATAAAAAATGGGGCCTTGCCTTGTTGCAACACTTGTTTGCAAAGAGCTC 761
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  661 GGTGGAGATAAAAAATGGGGCCTTGCCTTGTTGCAACACTTGTTTGCAAAGAGCTC 720

Qy  762 CTGAAGCCAAACAGAATCAGGCTGGGAACTGGGAGTTTATCCTCGTCGTCAAAGCAGCAG 821
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  721 CTGAAGCCAAACAGAATCAGGCTGGGAACTGGGAGTTTATCCTCGTCGTCAAAGCAGCAG 780
```

RESULT 2
US-09-896-186B-1
; Sequence 1, Application US/09896186B
; Publication No. US2003016227A1

```
Qy    840  GATGCTTATGCTTCATGCGCATCTTACAAGGTTCTTAAGGACCTTCCTGATGC  892
           ||||||| |||||||||||||||||||||||  || |||||||||||| |||||
Db    769  GATGCTTTTGCTTCTTGGTGTCTTTATCAGGCGATTAAAGATCCCCGGACGC  821
```

Query Match   26.3%; Score 276.2; DB 18; Length 1253;
Best Local Similarity 66.6%; Pred. No. 3.6e-68;
Matches 395; Conservative 0; Mismatches 198; Indels 0; Gaps 0;

```
Qy    300  AGGAATTTTCCAGCAATGCAATGCAGCTTATTGTATAGCAAGACTGCTACTGAG  359
           ||||||  ||| || |  ||| ||||| ||||| ||||  ||||| ||  ||
Db    276  ATGACAATTGCCTGTAATGAAGTTTAGTGGTCAAATTCTTATAGCAGGACTTTTGATGCT  335

Qy    360  GTTGATAAGCGAGCAATGCAGCTTATTAAAGTTCTTGATACCAAGAGAGATGAATCTGGA  419
           |||| | || ||||| |||| ||||||||| |||||| ||||  |||| ||| || |||
Db    336  GTAGAGAAGCTGCAACAAGCTCTTCCAAGAAATTCTCCAAGAAAAACGACCGACATGATG  395

Qy    420  ATAGCTTTTGTTGGCTTGGATATTGAGTGAGACAAGTTTGAGAAAAGGTGTTCTCCCG  479
           |||| |  ||  ||| |||||  | | ||||||  |  ||||||||| ||||| ||||
Db    396  CAAACTGCAATTGGATTGACATTGACAGTGAGTGGAAACCCACCTTCAGAAAAGGTGTTCCTCCC  455

Qy    480  GGGAAGGTTGCGACTGTCCAGATATGCTGTCCAAACATCTTATTGAAGATTCAACACTTGTAAAG  539
           || ||||| || |||||||||||  || | || ||||||||  | ||||| || ||  | ||||
Db    456  GGAAAGGTAGCAGTGATGCAGATATGGTGCAACTGACATTGTCATGTTCTACATCTA  515

Qy    540  TTTCATTCGGTATCCCTCAAAGTCTCGTGTGAAGCTTTCCATGACTATGGAGTTAGTATCC  599
           ||||||| |  | ||||||||| ||  |||||||||||| |||| | || |||| || |
Db    516  ATTCATTCTGGAATCCCTCAAAATTACAGCTTTGTTGCTGAAGGTTTTGAGAGATTATAACATATCTGTT  575

Qy    600  GTAGGTATTGGAATTGGACGATCTTCAGATTTGACTCTGTGAAGCTTTCCATGGAGTTAGTATC  659
           ||| ||||| ||||||||| || || ||||| |  | ||||| || |||||||||||| ||||
Db    576  GTTGGAGCTGGGATTGGACTGTGGATGGATCTCAATCTGTAATCAAAAGCTGGTGGAGAGATCATAAGTGG  635

Qy    660  AAAGATGTTGAGGATCTTCAGATTTGGTCTGGAGATAAAATGG  719
           ||||| || || |  ||| || || |  | |||||| |  ||
Db    636  AAAGGTGTGACGGATCTTTCTTTTTTCATGCTAATCAAAAGCTGTAATCATAAGTCG  695

Qy    720  GGCCTTGCCTCACTAACTGAGACACTTGTTGCAAGATTTATCCTCGTCAAAGCCAAACAGAATC  779
           |||||||||| | | || |||  || || |||  | ||  | || ||||| ||||||||||
Db    696  GGTCTTGCGTCATCTTTGACTGAAAAACTTCTATCAAAACAGCTTAAAAAGCCCAACAAAATA  755

Qy    780  AGGCTTGGGAACTGGGAGTTTTATCCTCGTCAAAGGCCTTACAATACGCAGCAACG  839
           ||||||| ||  |||||||  | | ||||||||| ||||| ||| |||| |||||
Db    756  AGACTGGGAAATTGGGAGGAGGTCCTCGTTTGTCAAAGGCAACTAGAGTATGCTGCAACA  815

Qy    840  GATGCTTATGCTTCATGCGCATCTTACAAGGTTCTTAAGGACCTTCCTGATGC  892
           ||||||| |||||||||||||||||||||||  || |||||||||||| |||||
Db    816  GATGCTTTTGCTTCTTGGTGTCTTTATCAGGCGATTAAAGATCCCCGGACGC  868
```

```
Qy    822  TTACAATACGCAGCAACGGATGCTTATGCTTCATGCGCATCTTACAAGGTTCTTAAGGAC  881
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    781  TTACAATACGCAGCAACGGATGCTTATGCTTCATGCGCATCTTACAAGGTAACAACAACG  840

Qy    882  CTTCCTGATGCTGTCAGTGCTCATAACGTGAAGGAAGCTTAAA  928
           || |||| | |||||  || | ||| || |||||| || ||||
Db    841  AAAAACCATCTTCTCCACACTCAACGACCTTGAAGCAAAAATCTCACA  887
```

Query Match   26.3%; Score 276.2; DB 9; Length 1170;
Best Local Similarity 66.6%; Pred. No. 3.4e-68;
Matches 395; Conservative 0; Mismatches 198; Indels 0; Gaps 0;

```
Qy    300  AGGAATTTTCCAGCAATGCAATGCAGCTTATTGTATAGCAAGACTGCTACTGAG  359
           ||||||  ||| || |  ||| ||||| ||||| ||||  ||||| ||  ||
Db    229  ATGACAATTGCCTGTAATGAAGTTTAGTGGTCAAATTCTTATAGCAGGACTTTTGATGCT  288

Qy    360  GTTGATAAGCGAGCAATGCAGCTTATTAAAGTTCTTGATACCAAGAGAGATGAATCTGGA  419
           |||| | || ||||| |||| ||||||||| |||||| ||||  |||| ||| || |||
Db    289  GTAGAGAAGCTGCAACAAGCTCTTCCAAGAAATTCTCCAAGAAAAACGACCGACATGATG  348

Qy    420  ATAGCTTTTGTTGGCTTGGATATTGAGTGAGACAAGTTTGAGAAAAGGTGTTCTCCCG  479
           |||| |  ||  ||| |||||  | | ||||||  |  ||||||||| ||||| ||||
Db    349  CAAACTGCAATTGGATTGACATTGACAGTGAGTGGAAACCCACCTTCAGAAAAGGTGTTCCTCCC  408

Qy    480  GGGAAGGTTGCGACTGTCCAGATATGCTGTCCAAACATCTTATTGAAGATTCAACACTTGTAAAG  539
           || ||||| || |||||||||||  || | || ||||||||  | ||||| || ||  | ||||
Db    409  GGAAAGGTAGCAGTGATGCAGATATGGTGCAACTGACATTGTCATGTTCTACATCTA  468

Qy    540  TTTCATTCGGTATCCCTCAAAGTCTCGTGTGAAGCTTTCCATGACTATGGAGTTAGTATCC  599
           ||||||| |  | ||||||||| ||  |||||||||||| |||| | || |||| || |
Db    469  ATTCATTCTGGAATCCCTCAAAATTACAGCTTTGTTGCTGAAGGTTTTGAGAGATTATAACATATCTGTT  528

Qy    600  GTAGGTATTGGAATTGGACGATCTTCAGATTTGACTCTGTGAAGCTTTCCATGGAGTTAGTATC  659
           ||| ||||| ||||||||| || || ||||| |  | ||||| || |||||||||||| ||||
Db    529  GTTGGAGCTGGGATTGGACTGTGGATGGATCTCAATCTGTAATCAAAAGCTGGTGGAGAGATCATAAGTCG  588

Qy    660  AAAGATGTTGAGGATCTTCAGATTTGGTCTGGAGATAAAATGG  719
           ||||| || || |  ||| || || |  | |||||| |  ||
Db    589  AAAGGTGTGACGGATCTTTCTTTTTTCATGCTAATCAAAAGCTGTAATCATAAGTCG  648

Qy    720  GGCCTTGCCTCACTAACTGAGACACTTGTTGCAAGATTTATCCTCGTCAAAGCCAAACAGAATC  779
           |||||||||| | | || |||  || || |||  | ||  | || ||||| ||||||||||
Db    649  GGTCTTGCGTCATCTTTGACTGAAAAACTTCTATCAAAACAGCTTAAAAAGCCCAACAAAATA  708

Qy    780  AGGCTTGGGAACTGGGAGTTTTATCCTCGTCAAAGGCCTTACAATACGCAGCAACG  839
           ||||||| ||  |||||||  | | ||||||||| ||||| ||| |||| |||||
Db    709  AGACTGGGAAATTGGGAGGAGGTCCTCGTTTGTCAAAGGCAACTAGAGTATGCTGCAACA  768
```

```
RESULT 5
US-10-741-601-18
; Sequence 18, Application US/10741601
; Publication No. US2004016519A1
; GENERAL INFORMATION:
;   APPLICANT: CARGILL, Michele et al.
;   TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
;   TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
;   FILE REFERENCE: CL001500
;   CURRENT APPLICATION NUMBER: US/10/741,601
;   CURRENT FILING DATE: 2003-12-22
;   NUMBER OF SEQ ID NOS: 26415
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 18
;   LENGTH: 5765
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-741-601-18

  Query Match             10.7%;  Score 112.2;  DB 19;  Length 5765;
  Best Local Similarity   54.1%;  Pred. No. 1.1e-20;
  Matches  272;  Conservative   1;  Mismatches  224;  Indels   6;  Gaps    2;

Qy    396 GATACCAAGAGAGATGAATCTGGAATAGCTTTTGTTCGCTTGGATATTGAGTGGAGACCA 455
          ||||||| ||||| |||||||||||||||||| |||||||| |||||| |||||||||||
Db    990 GATATTAGCATGAGTCTATCAGATGGGGATGTGTGGGATTTGACATGGAGTGGCCACCA 1049

Qy    456 AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCCAGATATGTGTAGATAGT 515
          ||||| ||| |||     |||||||||||
Db   1050 TTATACAATAGAGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTTCTGAG 1106

Qy    516 AATTATTGTGATGTTATGCATATTTT---CATTCTGTATCCCTCAAAGTCTCCAACAT 572
          |||||||||||||||||||||      |||||  ||||||
Db   1107 AGCAAATGTTACTTGTTCCACRTTTCTTCCATGTCAGTTTTTCCCCAGGGGATTAAAAATG 1166

Qy    573 CTTATTGAAGATTCAACACTTGTAAAGGTAGGTATTGGAATTGATGGTGACTCTGTGAAG 632
          |||||||||||||  ||||| ||||||||||||||
Db   1167 TTGCTTGAAAATAAAGCAGTTAAAAAGGCAGGTGTAGGAATTGAAGGAGATCAGTGGAAA 1226

Qy    633 CTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCCAAC 692
          |||||||||||| |||  |||||| ||||||||
Db   1227 CTTCTACGTGACTTTGATATCAAATTGAAGAATTTTGTGAGTTGACAGATGTTGCCAAT 1286

Qy    693 CAAAAAATTGGTGGAGATAAAAAATGGGGCCTTGCCTCCACTAACTGAGACACTTGTTGC 752
          |||||||||   |||||||||||||||||||
Db   1287 AAAAAGTGAAATGYACAGAGACCTGGAGCCTTAACAGTCTGGTTAAACACCTCTTAGGT 1346

Qy    753 AAAGAGTCCTGAAGCCAAACAGAATCAGGCTTGGGACTGGAGTTTTATCCTCTGTCA 812
          |||||||| ||||||||||||| ||||||
Db   1347 AAACAGCTCCTGAAAGACAAGTCTATCCGCTGTAGCAATTGGAGTAAATTCCTCTCACT 1406

Qy    813 AAGCAGCAGTTACAATACGCAGCAACGATGCTTATCGTCATGGCATCTTTACAAGGTT 872
          |||||||||||  ||||||||||||| |||  ||||
Db   1407 GAGGACCAGAAACTGTATGCAGCCACTGATGCTTATCGTGGTTTTATTATTTACCGAAAT 1466

Qy    873 CTTAAGGACCTTCCTGATGCTGT 895
          ||||||||||||||||||||
Db   1467 TTAGAGATTTTGGATGATACTGT 1489

RESULT 6
US-10-741-600-22
; Sequence 22, Application US/10741600
; Publication No. US2005002616AA1
; GENERAL INFORMATION:
;   APPLICANT: CARGILL, Michele et al.
;   TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
;   TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
;   FILE REFERENCE: CL001499
;   CURRENT APPLICATION NUMBER: US/10/741,600
;   CURRENT FILING DATE: 2003-12-22
;   NUMBER OF SEQ ID NOS: 73997
;   SOFTWARE: FastSEQ for Windows Version 4.0
```

```
; SEQ ID NO 22
;   LENGTH: 5765
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-741-600-22

  Query Match             10.7%;  Score 112.2;  DB 21;  Length 5765;
  Best Local Similarity   54.1%;  Pred. No. 1.1e-20;
  Matches  272;  Conservative   1;  Mismatches  224;  Indels   6;  Gaps    2;

Qy    396 GATACCAAGAGAGATGAATCTGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
          ||||||| ||||| |||||||||||||||||| |||||||| |||||| |||||||||||
Db    990 GATATTAGCATGAGTCTATCAGATGGGGATGTGTGGGATTTGACATGGAGTGGCCACCA 1049

Qy    456 AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCCAGATATGTGTAGATAGT 515
          ||||| ||| |||     |||||||||||
Db   1050 TTATACAATAGAGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTTCTGAG 1106

Qy    516 AATTATTGTGATGTTATGCATATTTT---CATTCTGTATCCCTCAAAGTCTCCAACAT 572
          |||||||||||||||||||||      |||||  ||||||
Db   1107 AGCAAATGTTACTTGTTCCACRTTTCTTCCATGTCAGTTTTTCCCCAGGGGATTAAAAATG 1166

Qy    573 CTTATTGAAGATTCAACACTTGTAAAGGTAGGTATTGGAATTGATGGTGACTCTGTGAAG 632
          |||||||||||||  ||||| ||||||||||||||
Db   1167 TTGCTTGAAAATAAAGCAGTTAAAAAGGCAGGTGTAGGAATTGAAGGAGATCAGTGGAAA 1226

Qy    633 CTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCCAAC 692
          |||||||||||| |||  |||||| ||||||||
Db   1227 CTTCTACGTGACTTTGATATCAAATTGAAGAATTTTGTGAGTTGACAGATGTTGCCAAT 1286

Qy    693 CAAAAAATTGGTGGAGATAAAAAATGGGGCCTTGCCTCCACTAACTGAGACACTTGTTGC 752
          |||||||||   |||||||||||||||||||
Db   1287 AAAAAGTGAAATGYACAGAGACCTGGAGCCTTAACAGTCTGGTTAAACACCTCTTAGGT 1346

Qy    753 AAAGAGTCCTGAAGCCAAACAGAATCAGGCTTGGGACTGGAGTTTTATCCTCTGTCA 812
          |||||||| ||||||||||||| ||||||
Db   1347 AAACAGCTCCTGAAAGACAAGTCTATCCGCTGTAGCAATTGGAGTAAATTCCTCTCACT 1406

Qy    813 AAGCAGCAGTTACAATACGCAGCAACGATGCTTATCGTCATGGCATCTTTACAAGGTT 872
          |||||||||||  ||||||||||||| |||  ||||
Db   1407 GAGGACCAGAAACTGTATGCAGCCACTGATGCTTATCGTGGTTTTATTATTTACCGAAAT 1466

Qy    873 CTTAAGGACCTTCCTGATGCTGT 895
          ||||||||||||||||||||
Db   1467 TTAGAGATTTTGGATGATACTGT 1489

RESULT 7
US-10-741-601-15
; Sequence 15, Application US/10741601
; Publication No. US2004016519A1
; GENERAL INFORMATION:
;   APPLICANT: CARGILL, Michele et al.
;   TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
;   TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
;   FILE REFERENCE: CL001500
;   CURRENT APPLICATION NUMBER: US/10/741,601
;   CURRENT FILING DATE: 2003-12-22
;   NUMBER OF SEQ ID NOS: 26415
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 15
;   LENGTH: 6428
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-741-601-15

  Query Match             10.7%;  Score 112.2;  DB 19;  Length 6428;
  Best Local Similarity   54.1%;  Pred. No. 1.2e-20;
  Matches  272;  Conservative   1;  Mismatches  224;  Indels   6;  Gaps    2;

Qy    396 GATACCAAGAGAGATGAATCTGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
          ||||||| ||||| |||||||||||||||||| |||||||| |||||| |||||||||||
Db    990 GATATTAGCATGAGTCTATCAGATGGGGATTTGACATGGAGTGGCCACCA 1049
```

Qy 456 AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCTCCAGATATGTGTAGATAGT 515
              | | ||||| || |||| || ||||||| | || ||||| ||| |
Db 1050 TTATACAATAGAGGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTTCTGAG 1106

Qy 516 AATTATTGTGATGTTATGCATATTTT---CATTCTGTATCCCTCAAAGTCTCCAACAT 572
              | | || | | ||| | || || ||||| | | ||| |||||
Db 1107 AGCAAATGTTACTTGTTCCACRTTTCTTCCCATGGGGGGATTGAGGATCTTCAGATTTCGAG 1166

Qy 573 CTTATTGAAGATTCAACACTTGTAAAGTAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 632
              ||||||||||||||| ||||| |||| | ||| ||||||| || || ||
Db 1167 TTGCTTGAAAATAAAGCAGTTAAAAGGCAGGTGTGGGATTTGAACATGGAGATCAGTGGAAA 1226

Qy 633 CTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCCAAC 692
              ||||||||| |||| | | || || ||| | | | |||| ||| ||||||
Db 1227 CTTCTACGTGACTTTGATATCAAATTGAAGAATTTTGTGGAGTTGACAGATGTGCCAAT 1286

Qy 693 CAAAAAATTGGTGGAGATAAAAAAATGGGGCCTTGCCTCACTAACTGAGACACTTGTTTGC 752
              | |||||||| || | ||| | | | ||||||| | || | || ||||
Db 1287 AAAAAGCTGAAATGYACAGAGACCTGGAGCCTTAACAGTCTGTTAAACACCTCTTAGGT 1346

Qy 753 AAAGAGCTCCTGAAGCCAAACAGAATCAGGCTGGGAACTGGGAGTTTTATCCTCTGTCA 812
              ||||||||||||||| ||||| |||||| | | | ||||||||||||||| |||
Db 1347 AACAGCTCCTGAAAGACAAGTCTATCCGCTGTAGCAGTGTGTAGGGAGTCTGACTCTCACT 1406

Qy 813 AAGCAGCAGTTACAATACGCAGCAACCGATGCTTATGCTTCATTGTTGTTTCGAAAT 872
              |||||||||| | ||||| || ||||||| | || | | ||| || |||| ||||
Db 1407 GAGGACCAGAAACTGTATGCAGCCACTGATGCTTATGCTGGTTTTATTATTTACCGAAAT 1466

Qy 873 CTTAAGGACCTTCCTGATGCTGT 895
              | |||||||||||||||||||||
Db 1467 TTAGAGATTTTGGATGATACTGT 1489

RESULT 8
US-10-741-600-19
; Sequence 19, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 6428
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-19

Query Match   10.7%;   Score 112.2;   DB 21;   Length 6428;
Best Local Similarity 54.1%;   Pred. No. 1.2e-20;
Matches 272;   Conservative   1;   Mismatches 224;   Indels 6;   Gaps   2;

Qy 396 GATACCAAGAAGAGATGAATCTGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
              |||| | | ||| || | ||| ||| | ||| |||||||||| | || ||
Db 990 GATATTAGCATGAGTCTATCAGATGGGGGATGTGGTGGGATTTGACATGGAGTGGCCACCA 1049

Qy 456 AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCTCCAGATATGTGTAGATAGT 515
              | | ||||| || |||| || ||||||| | || ||||| ||| |
Db 1050 TTATACAATAGAGGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTTCTGAG 1106

Qy 516 AATTATTGTGATGTTATGCATATTTT---CATTCTGTATCCCTCAAAGTCTCCAACAT 572
              | | || | | ||| | || || ||||| | | ||| |||||
Db 1107 AGCAAATGTTACTTGTTCCACRTTTCTTCCCATGGGGGGATTGAGGATCTTCAGATTTCGAG 1166

Qy 573 CTTATTGAAGATTCAACACTTGTAAAGTAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 632
              ||||||||||||||| ||||| |||| | ||| ||||||| || || ||
Db 1167 TTGCTTGAAAATAAAGCAGTTAAAAGGCAGGTGTGGGATTTGAACATGGAGATCAGTGGAAA 1226

RESULT 9
US-10-741-601-16
; Sequence 16, Application US/10741601
; Publication No. US2004016651A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001500
; CURRENT APPLICATION NUMBER: US/10/741,601
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 26415
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 6431
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-601-16

Query Match   10.7%;   Score 112.2;   DB 19;   Length 6431;
Best Local Similarity 54.1%;   Pred. No. 1.2e-20;
Matches 272;   Conservative   1;   Mismatches 224;   Indels   6;   Gaps   2;

Qy 396 GATACCAAGAAGAGATGAATCTGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
              |||| | | ||| || | ||| ||| | ||| |||||||||| | || ||
Db 990 GATATTAGCATGAGTCTATCAGATGGGGGATGTGGTGGGATTTGACATGGAGTGGCCACCA 1049

Qy 456 AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCTCCAGATATGTGTAGATAGT 515
              | | ||||| || |||| || ||||||| | || ||||| ||| |
Db 1050 TTATACAATAGAGGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTTCTGAG 1106

Qy 516 AATTATTGTGATGTTATGCATATTTT---CATTCTGTATCCCTCAAAGTCTCCAACAT 572
              | | || | | ||| | || || ||||| | | ||| |||||
Db 1107 AGCAAATGTTACTTGTTCCACRTTTCTTCCCATGGGGGGATTGAGGATCTTCAGATTTCGAG 1166

Qy 573 CTTATTGAAGATTCAACACTTGTAAAGTAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 632
              ||||||||||||||| ||||| |||| | ||| ||||||| || || ||
Db 1167 TTGCTTGAAAATAAAGCAGTTAAAAGGCAGGTGTGGGATTTGAACATGGAGATCAGTGGAAA 1226

Qy 633 CTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCCAAC 692
              ||||||||| |||| | | || || ||| | | | |||| ||| ||||||
Db 1227 CTTCTACGTGACTTTGATATCAAATTGAAGAATTTTGTGGAGTTGACAGATGTGCCAAT 1286

Qy 693 CAAAAAATTGGTGGAGATAAAAAAATGGGGCCTTGCCTCACTAACTGAGACACTTGTGAAG 752
              | |||||||| || | ||| | | | ||||||| | || | || ||||
Db 1287 AAAAAGCTGAAATGYACAGAGACCTGGAGCCTTAACAGTCTGTTAAACACCTCTTAGGT 1346

Qy 753 AAAGAGCTCCTGAAGCCAAACAGAATCAGGCTGGGAACTGGGAGTTTTATCCTCTGTCA 812
              ||||||||||||||| ||||| |||||| | | | ||||||||||||||| |||
Db 1347 AACAGCTCCTGAAAGACAAGTCTATCCGCTGTAGCAGTGTGTAGGGAGTCTGACTCTCACT 1406

Qy 813 AAGCAGCAGTTACAATACGCAGCAACCGATGCTTATGCTTCATTGGCATCTTTACAAGGTT 872
              |||||||||| | ||||| || ||||||| | || | | ||| || |||| ||||
Db   AAGCAGCAGTTACAATACGCAGCAACCGATGCTTATGCTTCATTGGCATCTTTACAAGGTT 872

```
Db  1407 GAGGACCAGAAACTGTATGCAGCCACTGATGCTTATGCTGTGTTTATTATTACCGAAAT 1466
              |||  ||  ||  |||||  ||  ||||||||||     ||||
Qy   873 CTTAAGGACCTTCCTGATGCTGT 895
              ||  |  ||||  |||
Db  1467 TTAGAGATTTTGGATGATACTGT 1489
```

RESULT 10
US-10-741-600-20
; Sequence 20, Application US/10741600
; Publication No. US2005002616 9A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 6431
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-20

Query Match   10.7%; Score 112.2; DB 21; Length 6431;
Best Local Similarity 54.1%; Pred. No. 1.2e-20;
Matches 272; Conservative 1; Mismatches 224; Indels 6; Gaps 2;

```
Qy   396 GATACCAAGAGAGAGAATCTGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
             |||| ||   |||   || |||||||| |||| |||||  |||||
Db   990 GATATTAGCATGAGTCTATCAGATGGGATGTGGTGGGATTTGACATGGTGGCCACCA 1049

Qy   456 AGTTTTAGAAAAGGTGTTCTCCCCGGGAAGGTTGCGACTGTCCAGATATGTGTAGATAGT 515
             ||||  |  ||  |||||  ||  |||| |||  |||||
Db  1050 TTATACAATAGAGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTTCTGAG 1106

Qy   516 AATTATTGTGATGTTATGCATATTTTT---CATTCTGGTATCCCTCAAAGTCTCCAACAT 572
             ||  |  ||   ||||| |||  ||| |||     ||| ||||||| |||||
Db  1107 AGCAAATGTTACTTGTTCCACRTTTCTTCCCATGTCAGTTTTCTCCCAGGGATTAAAAATG 1166

Qy   573 CTTATTGAAGATTCAACACTTGTAAAGGTAGGTATTGGAAGTTGAAGGAAGGAAATCAGGCGTTGGAAGGTTTCTCTGTCA 812
             |||| |  ||| |||   ||  | |||||  ||  ||| |||  |||  ||
Db  1167 TTGCTTGAAAATAAAGCAGTTAAAAAGCAGTGACATGGGATTTGAGGAGATCAGTGGAA 1226

Qy   633 CTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCCAAC 692
             ||||   |||  |||   ||  |  |  | |||||
Db  1227 CTTCTACGTGACTTTGATATCAAATTGAAGAATTTGTGGAGTTGACAGATGTGCCAAT 1286

Qy   693 CAAAAAATTGGTCGAGATAAAAAATGGGGCCTTGACCTCCACTAACTGAGACACTGTTTGC 752
             ||  |  |||   ||  |  | |||  |||
Db  1287 AAAAAGCTGAAATGYACAGAGACCTGGAGCCTTAACAGTCTCGTTAAACACCTCTTAGGT 1346

Qy   753 AAAGAGCTCCTGAAGCCAAACAGAATCAGGCTTGGGAACTGGGAGTTTTATCCTCTGTCA 812
             ||| |  ||   |||   ||||  |  |||||
Db  1347 AAACAGCTCCTGAAAGACAAGAGCTTATCCGCTGTAGCAATTGGAGTAAATTCCTCTCACT 1406

Qy   813 AGCAGCAGTTACAATACGCAGCAACCGATGCTTATGCTTCATGGCATCTTTACAAGGTT 872
             ||| | ||  ||||| ||| |  | ||||
Db  1407 GAGGACCAGAAACTGTATGCAGCCACTGATGCTTATGCTGTGTTTATTATTACCGAAAT 1466

Qy   873 CTTAAGGACCTTCCTGATGCTGT 895
             ||  |  ||||  |||
Db  1467 TTAGAGATTTTGGATGATACTGT 1489
```

RESULT 11
US-10-741-601-17
; Sequence 17, Application US/10741601
; Publication No. US20040166519A1
; GENERAL INFORMATION:

; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001500
; CURRENT APPLICATION NUMBER: US/10/741,601
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 26415
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 6521
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-601-17

Query Match   10.7%; Score 112.2; DB 19; Length 6521;
Best Local Similarity 54.1%; Pred. No. 1.2e-20;
Matches 272; Conservative 1; Mismatches 224; Indels 6; Gaps 2;

```
Qy   396 GATACCAAGAGAGAGAATCTGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
             |||| ||   |||   || |||||||| |||| |||||  |||||
Db   990 GATATTAGCATGAGTCTATCAGATGGGATGTGGTGGGATTTGACATGGTGGCCACCA 1049

Qy   456 AGTTTTAGAAAAGGTGTTCTCCCCGGGAAGGTTGCGACTGTCCAGATATGTGTAGATAGT 515
             ||||  |  ||  |||||  ||  |||| |||  |||||
Db  1050 TTATACAATAGAGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTTCTGAG 1106

Qy   516 AATTATTGTGATGTTATGCATATTTTT---CATTCTGGTATCCCTCAAAGTCTCCAACAT 572
             ||  |  ||   ||||| |||  ||| |||     ||| ||||||| |||||
Db  1107 AGCAAATGTTACTTGTTCCACRTTTCTTCCCATGTCAGTTTTCTCCCAGGGATTAAAAATG 1166

Qy   573 CTTATTGAAGATTCAACACTTGTAAAGGTAGGTATTGGAAGTTGAAGGAAGGAAATCAGGCGTTGGAAGGTTTCTCTGTGAAG 632
             |||| |  ||| |||   ||  | |||||  ||  ||| |||  |||  ||
Db  1167 TTGCTTGAAAATAAAGCAGTTAAAAAGCAGTGACATGGGATTTGAGGAGATCAGTGGAA 1226

Qy   633 CTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCCAAC 692
             ||||   |||  |||   ||  |  |  | |||||
Db  1227 CTTCTACGTGACTTTGATATCAAATTGAAGAATTTGTGGAGTTGACAGATGTGCCAAT 1286

Qy   693 CAAAAAATTGGTCGAGATAAAAAATGGGGCCTTGACCTCCACTAACTGAGACACTGTTTGC 752
             ||  |  |||   ||  |  | |||  |||
Db  1287 AAAAAGCTGAAATGYACAGAGACCTGGAGCCTTAACAGTCTCGTTAAACACCTCTTAGGT 1346

Qy   753 AAAGAGCTCCTGAAGCCAAACAGAATCAGGCTTGGGAACTGGGAGTTTTATCCTCTGTCA 812
             ||| |  ||   |||   ||||  |  |||||
Db  1347 AAACAGCTCCTGAAAGACAAGAAGCTTATCCGCTGTAGCAATTGGAGTAAATTCCTCTCACT 1406

Qy   813 AGCAGCAGTTACAATACGCAGCAACCGATGCTTATGCTTCATGGCATCTTTACAAGGTT 872
             ||| | ||  ||||| ||| |  | ||||
Db  1407 GAGGACCAGAAACTGTATGCAGCCACTGATGCTTATGCTGTGTTTATTATTACCGAAAT 1466

Qy   873 CTTAAGGACCTTCCTGATGCTGT 895
             ||  |  ||||  |||
Db  1467 TTAGAGATTTTGGATGATACTGT 1489
```

RESULT 12
US-10-741-600-21
; Sequence 21, Application US/10741600
; Publication No. US2005002616 9A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 6521
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-21

Qy   396 GATACCAAGAGAGAGATGAATCTGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
              ||| || |||| || | || |||| |||| ||||| | || || ||| ||||||||||
Db   990 GATATTAGCATGAATCTATCAGATGGGATGTGGTGGGAGATTGACATGGAGTGGCCACCA 1049

Qy   456 AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTTCCAGATATGTGTAGATAGT 515
              |||| || || || || || || |||||| |||||||||||| | | |||||||||
Db   1050 TTATACAATAGAGGGAAACT---TGGCAAGTTGCACTAATTCAGTTGTGTGTTTCTGAG 1106

Qy   516 AATTATTGTGATGTTATGCATATTTTT---CATTCTGGTATCCCTCAAAGTCTCCAACAT 572
              |||||||||| || ||| |||||| ||||| | ||||| |||||||||||||||
Db   1107 AGCAAATGTTACTTGTTCCACRTTTCTTCCACGTTTCTTCCCCAGGGATTAAAAATG 1166

Qy   573 CTTATTGAAGATTCAACACTTGTAAAGTGGTATTGGAATTGATGGTGACTCTGTGAAG 632
              |||| ||||||||||||| |||| ||| || |||| || ||| |||||||||||||
Db   1167 TTGCTTGAAAATAAAGCAGTTAAAAAGGCAGTGTAGAGAGAGGAGATCTTTCAGATTAGCCAAC 1226

Qy   633 CTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTAGCCAAC 692
              |||||||||| | || ||||| ||||||| ||| ||||| ||||||| |||||||||
Db   1227 CTTCTACGTGACTTTGATATCAAATTGAAGAATTTTGTGGAGTTGACAGATGTTGCCAAT 1286

Qy   693 CAAAAAATTGGTGGAGATAAAAAAATGYACAGAGACCTGGAGCTTTATCCTCCTAGGT 752
              |||||||||| ||| |||| |||| ||| || ||||| ||||| | | ||| |||
Db   1287 AAAAAGCTGAAATGYACAGAGACCTGGAGCCTTAAACACCTCTTAGGT 1346

Qy   753 AAAGAGCTCCTGAAGCCAAACAGAAATCAGGCTTGGGAACTGGGAGTTTTATCCTCTGTCA 812
              |||||||||| ||| ||||| ||| || ||||||||||| || |||||||||||||||||
Db   1347 AAACAGCTCCTGAAAGACAAGCTCTATCCGCTTATGCTGGTTTATTATTACCGAAAT 1406

Qy   813 AAGCAGCAGTTACAATACGCAGCAACGGATGCTTATGCTTCATGGCATCTTTACAAGGTT 872
              |||||||||| ||||||||||||||| |||| ||||| |||| ||||||| |||||||
Db   1407 GAGGACCAGAAACTGTATGCAGCCACTGATGCTTATGCTCGTGGTTTATTATTACCGAAAT 1466

Qy   873 CTTAAGGACCTTCCTGATGCTGT 895
              ||||||||||||||||||||||
Db   1467 TTAGAGATTTTGGATGATACTGT 1489

RESULT 13
US-09-896-186B-17
; Sequence 17, Application US/09896186B
; Publication No. US20030166227A1
; GENERAL INFORMATION:
;   APPLICANT: Joshua Z. Levin
;   APPLICANT: Ken Phillips
;   APPLICANT: Greg Budziszewski
;   APPLICANT: Fred Meins
;   APPLICANT: Zhenya Glazov
;   TITLE OF INVENTION: Methods of Controlling Gene Expression
;   FILE REFERENCE: PB/5-31481A
;   CURRENT APPLICATION NUMBER: US/09/896,186B
;   CURRENT FILING DATE: 2002-04-04
;   NUMBER OF SEQ ID NOS: 38
;   SOFTWARE: PatentIn Ver. 2.1
;
; SEQ ID NO 17
;   LENGTH: 4299
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-896-186B-17

Query Match   10.6%; Score 111; DB 10; Length 4299;
Best Local Similarity   54.1%;   Pred. No. 2.1e-20;
Matches 272; Conservative   0; Mismatches 225; Indels   6; Gaps   2;

Qy   396 GATACCAAGAGAGAGATGAATCTGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA 455
              ||| || |||| || | || |||| |||| ||||| | || || ||| ||||||||||
Db   202 GATATTAGCATGAATCTATCAGATGGGATGTGGTGGGAGATTGACATGGAGTGGCCACCA 261

Qy   456 AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTTCCAGATATGTGTAGATAGT 515

Db   262 TTATACAATAGAGGGAAACT---TGGCAAGTTGCACTAATTCAGTTGTGTGTTTCTGAG 318

Qy   516 AATTATTGTGATGTTATGCATATTTTT---CATTCTGGTATCCCTCAAAGTCTCCAACAT 572

Db   319 AGCAAATGTTACTTGTTCCACGTTTCTTCCCCAGGGATTAAAAATG 378

Qy   573 CTTATTGAAGATTCAACACTTGTAAAGTGGTATTGGAATTGATGGTGAAG 632

Db   379 TTGCTTGAAAATAAAGCAGTTAAAAAGGCAGTGTAGAGGAGATCAGTGGAAA 438

Qy   633 CTTTTCCATGACTATGGAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTAGCCAAC 692

Db   439 CTTCTACGTGACTTTGATATCAAATTGAAGAATTTTGTGGAGTTGACAGATGTTGCCAAT 498

Qy   693 CAAAAAATTGGTGGAGATAAAAAAATGGGGCCTTGCCTCACTAACTGACACTGTTTGC 752

Db   499 AAAAAGCTGAAATGTACAGAGACCTGGAGCCTTAAACACCTCTGTTAACAGTCTGTTAAGT 558

Qy   753 AAAGAGCTCCTGAAGCCAAACAGAATCAGGCTTGGGAACTGGGAGTTTTATCCTCTGTCA 812

Db   559 AAACAGCTCCTGAAAGACAAGCAAGTCTATCCGCTGAGCAATTGGAGTAAATTTCCTCTCACT 618

Qy   813 AAGCAGCAGTTACAATACGCAGCAACGGATGCTTATGCTTCATGGCATCTTTACAAGGTT 872

Db   619 GAGGACCAGAAACTGTATGCAGCCACTGATGCTTATGCTCGTGGTTTATTATTACCGAAAT 678

Qy   873 CTTAAGGACCTTCCTGATGCTGT 895

Db   679 TTAGAGATTTTGGATGATACTGT 701

RESULT 14
US-09-954-456-1131
; Sequence 1131, Application US/09954456
; Patent No. US20020115057A1
; GENERAL INFORMATION:
;   APPLICANT: Young, Paul
;   TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Cancer
;   TITLE OF INVENTION: Sets
;   FILE REFERENCE: 689290-76
;   CURRENT APPLICATION NUMBER: US/09/954,456
;   CURRENT FILING DATE: 2001-09-18
;   PRIOR APPLICATION NUMBER: US/60/233,617
;   PRIOR FILING DATE: 2000-09-18
;   PRIOR APPLICATION NUMBER: US/60/234,052
;   PRIOR FILING DATE: 2000-09-20
;   PRIOR APPLICATION NUMBER: US/60/234,923
;   PRIOR FILING DATE: 2000-09-25
;   PRIOR APPLICATION NUMBER: US/60/235,134
;   PRIOR FILING DATE: 2000-09-25
;   PRIOR APPLICATION NUMBER: US/60/235,637
;   PRIOR FILING DATE: 2000-09-26
;   PRIOR APPLICATION NUMBER: US/60/235,638
;   PRIOR FILING DATE: 2000-09-26
;   PRIOR APPLICATION NUMBER: US/60/235,711
;   PRIOR FILING DATE: 2000-09-27
;   PRIOR APPLICATION NUMBER: US/60/235,720
;   PRIOR FILING DATE: 2000-09-27
;   PRIOR APPLICATION NUMBER: US/60/235,840
;   PRIOR FILING DATE: 2000-09-27
;   PRIOR APPLICATION NUMBER: US/60/235,637
;   PRIOR FILING DATE: 2000-09-27
;   PRIOR APPLICATION NUMBER: US/60/235,863
;   PRIOR FILING DATE: 2000-09-27
;   NUMBER OF SEQ ID NOS: 2276
;   SOFTWARE: PatentIn version 3.0
;
; SEQ ID NO 1131
;   LENGTH: 5189
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-954-456-1131

Query Match   10.6%; Score 111; DB 9; Length 5189;
Best Local Similarity   54.1%;   Pred. No. 2.4e-20;

```
Matches   272;   Conservative   0;   Mismatches   225;   Indels   6;   Gaps   2;

Qy  396  GATACCAGAGAGAGATCGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA    455
              |||||        ||      |    |    | | |   || ||     |||||||
Db  433  GATATTAGCATGAGTCTATCAGATGGGGATGTGGTGGGATTTGACATGGGCCACCA    492

Qy  456  AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCCAGATATGTGTAGATAGT    515
              || ||||      |  |||             |||||     ||     ||
Db  493  TTATACAATAGAGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTCTGAG    549

Qy  516  AATTATTGTGATGTTATGCATATTTTT---CATTCTGGTATCCCTCAAAGTCTCCAACAT    572
              | |    |   || |                |||       |||||||
Db  550  AGCAAATGTTACTTGTTCCACGTTCTTCCATGTCAGTTTTTCCCCAGGGATTAAAAATG    609

Qy  573  CTTATTGAAGATTCAACACTTGTAAAGGTAGGTATTGAGTGGAATTGATGCTCTGTGAAG    632
              |||   | |  | ||         |||  |   |||     ||
Db  610  TTGCTTGAAAATAAAGCAGTTAAAAAGGCAGGTGTAGGAGATCAGTGGAA          669

Qy  633  CTTTCCATGACTATGGCAGTTAGTATCAAAGATGTTGAGGATCTTTCAGATTTAGCCAAC    692
              ||||||       |||   || |    || |||  ||  |||||  |||||||
Db  670  CTTCTACGTGACTTTGATATCAAATTGAAGAATTTTGTGGAGTTGACAGATGTTGCCAAT    729

Qy  693  CAAAAAATTGGTGGAGATAAAAAAATGGGGCCCTGCCTCACTAACTGAGACACTTGTTTGC    752
              |||||     |||              ||  |||    ||||||
Db  730  AAAAAGCTGAAATGTACAGAGACCTGGAGCCTTAAACAGTCTCGTTAAACACCTCTTAGGT    789

Qy  753  AAAGAGCTCCTGAAGCCAAACAGAATCAGGCTTGGGACTCTGGGAGTTTTATCCTCTGTCA    812
              |||||||||        ||||||||          ||||      |||||  |||
Db  790  AAACAGTCCTGAAAAGACAAGTCTATCCGCTGAGCAATTGGAGTAAAATTTCCTCTCACT    849

Qy  813  AAGCAGCAGTTACAATACGCAGCAACGATGCTTATGCTTCATGGCATCTTTACAAGGTT    872
              |||      |     |||  ||||||| ||      |||  ||||
Db  850  GAGGACCAGAAACTGTATGCAGCCACTGATGCTTATGCGTATGCTGGTTTTATTATTTACCGAAAT    909

Qy  873  CTTAAGGACCTTCCTGATGCTGT    895
              ||  ||||||    ||||||
Db  910  TTAGAGATTTTGGATGATGATACTGT    932


Search completed: July 11, 2005, 09:33:02
Job time : 5296 secs
```

```
Query Match        10.6%;  Score 111;  DB 9;  Length 5189;
Best Local Similarity  54.1%;  Pred. No. 2.4e-20;
Matches   272;  Conservative   0;  Mismatches  225;  Indels  6;  Gaps  2;

Qy  396  GATACCAGAGAGAGATCGGAATAGCTTTTGTTGGCTTGGATATTGAGTGGAGACCA    455
              |||||        ||      |    |    | | |   || ||     |||||||
Db  433  GATATTAGCATGAGTCTATCAGATGGGGATGTGGTGGGATTTGACATGGGCCACCA    492

Qy  456  AGTTTTAGAAAAGGTGTTCTCCCGGGAAGGTTGCGACTGTCCAGATATGTGTAGATAGT    515
              || ||||      |  |||             |||||     ||     ||
Db  493  TTATACAATAGAGGGAAACT---TGGCAAAGTTGCACTAATTCAGTTGTGTGTTCTGAG    549
```

This Page Blank (uspto)